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ESTES LANDFILL RI/FS REMEDIAL INVESTIGATION REPORT

Volume V of V
Appendix L - P

PART I

Prepared for
Arizona Department of Environmental Quality



By



**Environmental Science &
Engineering, Inc.**

A MACTEC COMPANY

ESTES LANDFILL DATA REVIEW

Project Number: 11322 048
Data Reviewer: M. CLINE
Date of Review: 4-4-94
Sample Matrix: AQUEOUS
Sampling Round: DECEMBER '91

x = OK

* = Problem as noted

1. Review chain of custody sheets
2. Review case narrative
3. Technical holding times met
4. Spike recoveries
5. Spike duplicate recoveries
6. % difference $\frac{MS-MSD}{1/2(MS+MSD)}$
7. Method blanks
8. Trip blanks

General comments: ANALYZED BY VISTA LABORATORIES

4. - SPIKE SAMPLE ON 12-09-91 HAD 123% RECOVERY OF CHLOROBENZENE, LIMIT=115
- SPIKE SAMPLE ON 12-13-91 HAD 127% RECOVERY OF CHLOROBENZENE, LIMIT=124
5. - SPIKE DUPLICATE SAMPLE ON 12-09-91 HAD 127% RECOVERY OF CHLOROBENZENE
LIMIT=115
- SPIKE DUPLICATE SAMPLE ON 12-10-91 HAD 119% RECOVERY OF CHLOROBENZENE
LIMIT=115.
- SPIKE DUPLICATE SAMPLE ON 12-13-91 HAD 125% RECOVERY OF CHLOROBENZENE
LIMIT=124
6. - SPIKE DUPLICATE SAMPLE ON 12-16-91 HAD A RPD OF 7, LIMIT=6.
7. - FIELD BLANK EW-FB1 CONTAINED 0.22 MG/L OF 1,2-DICHLOROETHANE.
- FIELD BLANK EW-FB2 CONTAINED 0.25 MG/L OF 1,2-DICHLOROETHANE AND
0.64 MG/L OF TOLUENE.
- FIELD BLANK EW-FB3 CONTAINED 0.33 MG/L OF 1,2-DICHLOROETHANE. OVER

8. - TRIP BLANK EW-TBI HAD 0.65 $\mu\text{g/l}$ OF TOLUENE

3. - TECHNICAL HOLDING TIME FOR EW-RWI WAS 15 DAYS

Were matrix spike recoveries reviewed and found to meet data control limits? Yes No

If no, check the appropriate boxes.

- The matrix spike (MS) performed on ¹²⁻⁰⁹⁻⁹¹ 12-13-91 was (circle one) less than/greater than the % accuracy limits as follows:
CHLOROBENZENE RECOVERY WAS 123%, LIMIT = 115%
CHLOROBENZENE RECOVERY WAS 127, LIMIT = 124%
- The matrix spike duplicate (MSD) performed on ¹²⁻⁹⁻⁹¹ ~~12-18-91~~ 12-13-91 (circle one) was less than/greater than the % accuracy limits as follows:
CHLOROBENZENE RECOVERY WAS 127% LIMIT = 115%; CHLOROBENZENE RECOVERY WAS 119%, LIMIT = 115%; CHLOROBENZENE RECOVERY WAS 125% LIMIT = 124%
- The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:
RPD FOR MATRIX SPIKE ON 12-16-91 WAS 7 FOR TOLUENE, LIMIT WAS 6.
- The analytical data were qualified for the following reason:

Comments:

Were surrogate recoveries found to be within acceptable QC limits? Yes No

If no, check the appropriate boxes.

- The VOC surrogate recovery was greater than the upper acceptance limit as discussed for the following samples:

- Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were not qualified.
- The VOC surrogate recovery was greater than or equal to 10% but less than the lower acceptance limit as discussed for the following samples:

- Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were qualified as approximated "UJ".
- The VOC surrogate recovery was less than 10% as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were rejected "R".

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than the upper acceptance limit as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were not qualified.

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than or equal to 10% but less than the lower acceptance limit discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were qualified as approximated "UJ".

- The SVOC surrogate recovery was less than 10% as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both was qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were rejected "R".

Comments:

Were concentrations of any analyses found in the method blanks? Yes _____ No

If yes, list the detected constituents and their associated concentration.

Comments:

Were constituent concentrations in the database found to match the raw data? Yes No _____

Identify any discrepancies.

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TW-3

Compound Name	12/14/91	12/17/91	12/14/91
	28	29	30
0 WELL	TW-3	TW-4	TW-P
0 DATE	12/12/91	12/12/91	12/12/91
0 SAMPLE CODE	FO	FO	FO
1 Chloromethane	<0.2	<0.2	<0.2
2 Bromomethane	<0.2	<0.2	<0.2
3 Vinyl chloride	16	<0.2	6.2
4 Chloroethane	<0.2	<0.2	<0.2
5 Methylene chloride	<2.0	<2.0	<2.0
6 1,1-Dichloroethene	0.62	<0.2	1.4
7 1,1-Dichloroethane	2.7	<0.2	2.6
8 1,2-Dichloroethene (cis/trans)	.	.	.
9 1,2-Dichloroethene (cis)	11	<0.2	13
9 1,2-Dichloroethene (trans)	<0.2	<0.2	<0.2
9 Chloroform	<0.2	6.5	0.89
10 1,1,2-Trichloro-1,2,2-trifluoroethane	<0.2	<0.2	<0.2
11 1,2-Dichloroethane	<0.2	<0.2	<0.2
12 1,1,1-Trichloroethane	<0.2	<0.2	<0.2
13 Carbon Tetrachloride	<0.2	<0.2	<0.2
14 Bromodichloromethane	<0.2	0.33	<0.2
15 1,2-Dichloropropane	<0.2	<0.2	<0.2
16 trans-1,3-Dichloropropene	<0.2	<0.2	<0.2
17 Trichloroethene	2.1	<0.2	6.0
18 Dibromochloromethane	<0.2	<0.2	<0.2
19 cis-1,3-Dichloropropene	<0.2	<0.2	<0.2
20 1,1,2-Trichloroethane	<0.2	<0.2	<0.2
21 EDB (1,2-Dibromoethane)	.	.	.
22 Bromoform	<0.2	<0.2	<0.2
23 1,1,2,2-Tetrachloroethane	<0.2	<0.2	<0.2
25 Chlorobenzene-601	1.7	<0.2	0.99
27 Benzene	<0.5	<0.5	<0.5
28 Toluene	2.3	0.76	<0.5
28 Chlorobenzene-602	2.5	<0.5	1.4
30 Ethyl benzene	<0.5	<0.5	<0.5
31 1,3-Dichlorobenzene	<1.0	<1.0	<1.0
32 1,4-Dichlorobenzene	<1.0	<1.0	<1.0
33 1,2-Dichlorobenzene	6.0	<1.0	3.2
35 Dichlorodifluoromethane	<0.2	<0.2	<0.2
37 Trichlorofluoromethane	<0.2	<0.2	<0.2
41 2-Chloroethyl Vinyl Ether	<0.2	<0.2	<0.2
42 Tetrachloroethene	0.34	<0.2	1.2
43 Total xylenes	.	.	.

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7. Method blanks
8. Trip blanks

General comments:

- 7. - METHOD BLANK ON 12/26/93 CONTAINED 1.2 $\mu\text{g/l}$ OF 1,2-DICHLOROETHENE.
- METHOD BLANK ON 12/27/93 CONTAINED 4.7 $\mu\text{g/l}$ OF METHYLENE CHLORIDE.
- METHOD BLANK ON 12/19/93 CONTAINED 5.5 $\mu\text{g/l}$ OF METHYLENE CHLORIDE, AND 1.6 $\mu\text{g/l}$ OF 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE.
- METHOD BLANK ON 12/20/93 CONTAINED METHYLENE CHLORIDE (5.1 $\mu\text{g/l}$).
- *. - FIELD BLANK, FB3 (601), CONTAINED 7.0 $\mu\text{g/l}$ OF METHYLENE CHLORIDE, AND 2.5 $\mu\text{g/l}$ OF 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE.
- FIELD BLANK, FB4 (601), CONTAINED 2.8 $\mu\text{g/l}$ OF METHYLENE CHLORIDE, AND 1.9 $\mu\text{g/l}$ OF 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE.

OVER
↙

- B. - TRIP BLANK (EW-TB4) CONTAINED 8.6 MG/L METHYLENE CHLORIDE,
AND 3.9 MG/L 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
- TRIP BLANK (EW-TB5) CONTAINED 7.6 MG/L OF METHYLENE CHLORIDE,
AND 2.8 MG/L OF 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE.
- TRIP BLANK (EW-TB7) CONTAINED 3.2 MG/L OF METHYLENE CHLORIDE,

WELL	EW-OE	SB-4	SB-4	SB-6	TW-1	TW-3	TW-4
DATE SAMPLED	9/15/93	9/10/93	9/10/93	9/10/93	9/14/93	9/14/93	9/14/93
DATE ANALYZED	9/28/93	9/24/93	9/24/93	9/24/93	9/24/93	9/25/93	9/25/93
SAMPLE CODE	FO	FO	FD	FO	FO	FO	FO
CHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
BROMOMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
VINYL CHLORIDE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	<1.0	5.5	5.0	8.5	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	<1.0	2.7	2.8	<1.0	1.3	<1.0	<1.0
1,2-DICHLOROETHENE (CIS)	<1.0	7.2	5.8	1.0	7.1	<1.0	<1.0
1,2-DICHLOROETHENE (TRANS)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	<1.0	1.3	1.1	2.3	1.5	<1.0	<1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<1.0	3.3	2.7	4.3	<1.0	<1.0	<1.0
1,2-DICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-TRICHLOROETHANE	<1.0	2.7	2.3	1.1	1.0	<1.0	<1.0
CARBON TETRACHLORIDE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BROMODICHLOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROPROPANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRANS-1,3-DICHLOROPROPENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	<1.0	38	36	55	4.4	<1.0	<1.0
DIBROMOCHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
CIS-1,3-DICHLOROPROPENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BROMOFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-TETRACHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROBENZENE-601	34	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DICHLOROFLUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TRICHLOROFLUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-CHLOROETHYL VINYL ETHER	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TETRACHLOROETHENE	<1.0	6.7	7.0	<1.0	1.2	<1.0	<1.0
BENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0
TOLUENE-602	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0
CHLOROBENZENE-602	35	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	1.1
ETHYLBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	1.1
1,2-DICHLOROBENZENE-602	<2.0	<2.0	<2.0	<2.0	<2.0 UJ	<2.0	2.1
1,3-DICHLOROBENZENE-602	<2.0	<2.0	<2.0	<2.0	<2.0 UJ	<2.0	<2.0
1,4-DICHLOROBENZENE-602	2.2	<2.0	<2.0	<2.0	<2.0 UJ	<2.0	2.4
TOTAL XYLENES-602	<2.0	<2.0	<2.0	<2.0	<2.0 UJ	3.0	3.6

FD = Field Duplicate, FO = Field Original

U - Analyte not detected above reported sample quantification limit

J - Analyte positively identified, reported concentration is approximate

NJ - Analyte tentatively identified, reported concentration is approximate

UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte

R - Sample results are rejected due to serious deficiencies in QC

B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs

D - Compound analyzed at greater dilution than the rest of the run

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rt	Compound Name	19
0	WELL	TW-4
0	DATE	9/14/93
0	SAMPLE CODE	FO
1	Chloromethane	<2.0
2	Bromomethane	<2.0
3	Vinyl chloride	<1.0
4	Chloroethane	<2.0
5	Methylene chloride	<2.0
6	1,1-Dichloroethane	<1.0
7	1,1-Dichloroethane	<1.0
9	1,2-Dichloroethene (cis)	<1.0
9	1,2-Dichloroethene (trans)	<1.0
9	Chloroform	<1.0
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0
11	1,2-Dichloroethane	<1.0
12	1,1,1-Trichloroethane	<1.0
13	Carbon Tetrachloride	<1.0
14	Bromodichloromethane	<1.0
15	1,2-Dichloropropane	<1.0
16	trans-1,3-Dichloropropene	<1.0
17	Trichloroethene	<1.0
18	Dibromochloromethane	<2.0
19	cis-1,3-Dichloropropene	<2.0
20	1,1,2-Trichloroethane	<1.0
22	Bromoform	<1.0
23	1,1,2,2-Tetrachloroethane	<1.0
25	Chlorobenzene-601	<1.0
27	Benzene	<1.0
28	Toluene	<1.0
28	Chlorobenzene-602	1.1
30	Ethyl benzene	1.1
31	1,3-Dichlorobenzene	<2.0
32	1,4-Dichlorobenzene	2.4
33	1,2-Dichlorobenzene	2.1
35	Dichlorodifluoromethane	<2.0
37	Trichlorofluoromethane	<2.0
41	2-Chloroethyl Vinyl Ether	<2.0
42	Tetrachloroethene	<1.0
43	Total xylenes	3.6

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EW-8

Standard report

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Port	Compound Name	9/24/93 10	9/27/93 11	9/27/93 12	9/28/93 13	9/24/93 14	9/24/93 15	9/24/93 16	9/24/93 17	9/25/93 18
D = F		EW-8 9/10/93 FO	EW-11 9/15/93 FO	EW-NE 9/13/93 FO	EW-OE 9/15/93 FO	SB-4 9/10/93 FO	SB-4 9/10/93 FO	SB-6 9/10/93 FO	TW-1 9/14/93 FO	TW-3 9/14/93 FO
0	WELL									
0	DATE									
0	SAMPLE CODE									
0										
1	Chloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2	Bromomethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
3	Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4	Chloroethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
5	Methylene chloride	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
6	1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	5.5	5.0	8.5	<1.0	<1.0
7	1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	2.7	2.8	<1.0	1.3	<1.0
9	1,2-Dichloroethene (cis)	<1.0	<1.0	<1.0	<1.0	7.2	5.8	1.0	7.1	<1.0
9	1,2-Dichloroethene (trans)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
9	Chloroform	<1.0	<1.0	<1.0	<1.0	1.3	1.1	2.3	1.5	<1.0
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0	<1.0	<1.0	<1.0	3.3	2.7	4.3	<1.0	<1.0
11	1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
12	1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	2.7	2.3	1.1	1.0	<1.0
13	Carbon Tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
14	Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
15	1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
16	trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
17	Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
18	Dibromochloromethane	<2.0	<2.0	<2.0	<2.0	38	36	55	4.4	<1.0
19	cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
20	1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
22	Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
23	1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
25	Chlorobenzene-601	<1.0	<1.0	1.2	34	<1.0	<1.0	<1.0	<1.0	<1.0
27	Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
28	Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0-0.5	<1.0
28	Chlorobenzene-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0-0.5	<1.0
30	Ethyl benzene	<1.0	<1.0	2.0	35	<1.0	<1.0	<1.0	<1.0-0.5	<1.0
31	1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0-0.5	<1.0
32	1,4-Dichlorobenzene	3.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0-0.5	<2.0
33	1,2-Dichlorobenzene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0-0.5	<2.0
35	Dichlorodifluoromethane	2.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0-0.5	<2.0
37	Trichlorofluoromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
41	2-Chloroethyl Vinyl Ether	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
42	Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0
43	Total xylenes	4.4	<2.0	<2.0	<2.0	6.7	7.0	<1.0	1.2	<1.0
						<2.0	<2.0	<2.0	<2.0-0.5	3.0

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BW-SD

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Port	Compound Name	9/24/93 1	9/24/93 2	9/27/93 3	9/24/93 4	9/23/93 5	9/27/93 6	9/23/93 7	9/27/93 8	9/27/93 9
FD = F1		BW-SD 9/14/93 FO	BW-SES 9/14/93 FO	EW-1 9/15/93 FO	EW-2 9/10/93 FO	EW-4 9/09/93 FO	EW-5 9/15/93 FO	EW-6 9/09/93 FO	EW-7 9/15/93 FO	EW-7 9/15/93 FO
0	WELL									
0	DATE									
0	SAMPLE CODE									
0										
1	Chloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<50	<2.0	<2.0
2	Bromomethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<50	<2.0	<2.0
3	Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<50	<2.0	<2.0
4	Chloroethane	<2.0	<2.0	<2.0	<1.0	71	190	2,700	<1.0	<1.0
5	Methylene chloride	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<50	<2.0	<2.0
6	1,1-Dichloroethene	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<50	<2.0	<2.0
7	1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
9	1,2-Dichloroethene (cis)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
9	1,2-Dichloroethene (trans)	<1.0	<1.0	<1.0	<1.0	34	230	1,200	<1.0	<1.0
9	Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	9.1	29	<1.0	<1.0
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
11	1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
12	1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
13	Carbon Tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
14	Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
15	1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
16	trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
17	Trichloroethene	1.6	1.5	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
18	Dibromochloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	7.2	<25	1.2	1.1
19	cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<50	<2.0	<2.0
20	1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<50	<2.0	<2.0
22	Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
23	1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
25	Chlorobenzene-601	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<25	<1.0	<1.0
27	Benzene	<1.0	<1.0	<1.0	<1.0	3.3	27	130	<1.0	<1.0
28	Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<25	<1.0	<1.0
28	Chlorobenzene-602	<1.0	<1.0	<1.0	1.2	<1.0	1.6	<25	<1.0	<1.0
30	Ethyl benzene	<1.0	<1.0	<1.0	<1.0	3.7	27	150	<1.0	<1.0
31	1,3-Dichlorobenzene	<1.0	<1.0	<1.0	1.5	<1.0	1.6	89	<1.0	<1.0
32	1,4-Dichlorobenzene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	1,500	<2.0	<2.0
33	1,2-Dichlorobenzene	<2.0	<2.0	<2.0	<2.0	<2.0	4.8	1,600	<2.0	<2.0
35	Dichlorodifluoromethane	<2.0	<2.0	<2.0	<2.0	6.8	58	2,000	<2.0	<2.0
37	Trichlorofluoromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<50	<2.0	<2.0
41	2-Chloroethyl Vinyl Ether	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<50	<2.0	<2.0
42	Tetrachloroethene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<50	<2.0	<2.0
43	Total xylenes	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0
		<2.0	<2.0	<2.0	7.3	<2.0	7.4	150	<2.0	4.3

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were rejected "R".

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than the upper acceptance limit as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were not qualified.

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than or equal to 10% but less than the lower acceptance limit discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were qualified as approximated "UJ".

- The SVOC surrogate recovery was less than 10% as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both was qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were rejected "R".

Comments:

Were concentrations of any analyses found in the method blanks? Yes No

If yes, list the detected constituents and their associated concentration.

Comments:

Were constituent concentrations in the database found to match the raw data? Yes No

Identify any discrepancies.

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No

If no, check the appropriate boxes.

- The matrix spike (MS) performed on 9/28/93 was (circle one) less than/greater than the % accuracy limits as follows:

- The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

- The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

- The analytical data were qualified for the following reason:

Comments: SAMPLE CONCENTRATION (34.6) GREATER THAN SPIKE LEVEL (20 µg/L)

Were surrogate recoveries found to be within acceptable QC limits? Yes ___ No

If no, check the appropriate boxes.

- The VOC surrogate recovery was greater than the upper acceptance limit as discussed for the following samples:

- The VOC surrogate recovery was greater than or equal to 10% but less than the lower acceptance limit as discussed for the following samples:
TW-1 (602) TRIFLUOROTOLUENE, RECOVERY = 77%, LIMIT = 80%

- The VOC surrogate recovery was less than 10% as discussed for the following samples:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No

If no, check the appropriate boxes.

The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:

The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

⁶⁰² The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

CHLOROBENZENE RPD = 11, LIMIT = 10

The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No

If no, check the appropriate boxes.

⁶⁰² The matrix spike (MS) performed on 9/27/93 was (circle one) less than/greater than the % accuracy limits as follows:

CHLOROBENZENE, REC = 58, LIMIT = 71

The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

⁶⁰² The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

CHLOROBENZENE, RPD = 47, LIMIT = 10

? The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No

If no, check the appropriate boxes.

- The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:

- The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

- The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

- The analytical data were qualified for the following reason:

Comments:

SAMPLE ON 9/28/93, 601, SAMPLE CONCENTRATION (34.0) GREATER THAN THE SPIKE (20mg/L).

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No

If no, check the appropriate boxes.

- 602 The matrix spike (MS) performed on 9/21/93 was (circle one) less than greater than the % accuracy limits as follows:
BENZENE REC = 155%, LIMIT = 123%
TOLUENE REC = 156%, LIMIT = 124%
- 602 The matrix spike duplicate (MSD) performed on 9/21/93 (circle one) was less than greater than the % accuracy limits as follows:
BENZENE REC = 157%, LIMIT = 123%
TOLUENE REC = 164%, LIMIT = 124%
- The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

- ? The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes No

If no, check the appropriate boxes.

601 The matrix spike (MS) performed on 9/24/93 was (circle one) less than/greater than the % accuracy limits as follows:
1,1-DICHLOROETHENE, REC=147, LIMIT=139

601 The matrix spike duplicate (MSD) performed on 9/24/93 (circle one) was less than/greater than the % accuracy limits as follows:
1,1-DICHLOROETHENE, REC=187, LIMIT=139

601 The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:
1,1-DICHLOROETHENE, REC=24, LIMIT=19.

? The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes No

If no, check the appropriate boxes.

601 The matrix spike (MS) performed on 9/27/93 was (circle one) less than/greater than the % accuracy limits as follows:
CHLORO BENZENE, REC=57, LIMIT=60.

The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

601 The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:
1,1-DICHLOROBENZENE, RPD=40, LIMIT=19; TRICHLOROETHENE, RPD=
LIMIT=11; CHLOROBENZENE RPD=54, LIMIT=14

? The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No

If no, check the appropriate boxes.

601 The matrix spike (MS) performed on 9/21/93 was (circle one) less than greater than the % accuracy limits as follows:
TRICHLOROETHENE, RECOVERY GREATER THAN SPIKE CONCENTRATION
SPIKE = 200 µg/l RECOVERY = 223 µg/l.

601 The matrix spike duplicate (MSD) performed on 9/21/93 (circle one) was less than greater than the % accuracy limits as follows:
1,1-DICHLOROETHENE, REC. = 152%, LIMIT = 139%. TRICHLOROETH
REC = 253 µg/l, SPIKE = 200 µg/l.

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No

If no, check the appropriate boxes.

601 The matrix spike (MS) performed on 9/23/93 was (circle one) less than greater than the % accuracy limits as follows:
TRICHLOROETHENE, REC. = 133%, LIMIT = 117%.

601 The matrix spike duplicate (MSD) performed on 9/23/93 (circle one) was less than greater than the % accuracy limits as follows:
TRICHLOROETHENE, REC = 136%, LIMIT = 117%

601 The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:
1,1-DICHLOROETHENE, RPD = 30, LIMIT = 19.

The analytical data were qualified for the following reason:

Comments:

ESTES LANDFILL DATA REVIEW

Project Number: 11322 048
Data Reviewer: M. CLINE
Date of Review: 4-8-94
Sample Matrix: AQUEOUS
Sampling Round: SEPTEMBER, '93

x = OK

* = Problem as noted

1. * Review chain of custody sheets
2. * Review case narrative
3. Technical holding times met
4. ~~x~~ Spike recoveries
5. ~~x~~ Spike duplicate recoveries
6. ~~x~~ % difference $\frac{MS-MSD}{1/2(MS+MSD)}$
7. X Method blanks
8. ~~x~~ Trip blanks

General comments:

1. - ONE VIAL BROKEN FOR EW-7DZ.
 - EW-TBA OUT OF HOLDING TIME
 - EW-TB OUT OF HOLDING TIME
2. - THE MATRIX SPIKE & DUPLICATE FOR EW-13LS WERE OUTSIDE QC LIMITS FOR 1,1-DICHLOROETHENE, BENZENE, AND TOLUENE.
 - SIGNIFICANT DIFFERENCE BETWEEN GC/MS & GC FOR TRICHLOROETHENE, GL=20%
GC/MS = 57ug/l.
 - THE MATRIX SPIKE & DUPLICATE FOR EW-1LS WERE OUTSIDE QC LIMITS FOR 1,1-DICHLOROETHENE, BENZENE, AND TOLUENE.
 - THE MATRIX SPIKE & DUPLICATE FOR EW-8LS WERE OUTSIDE QC LIMITS FOR 1,1-DICHLOROETHENE.
 - THE MATRIX SPIKE & DUPLICATE FOR EW-1 WERE OUTSIDE QC LIMITS FOR 1,1-DICHLOROETHENE AND CHLORO BENZENE. OVER

* - FIELD BLANK, EW-FBZ (602) CONTAINED 1.1 $\mu\text{g}/\text{L}$ OF TOLUENE.

8. - TRIP BLANK, EW-TBA (602) CONTAINED 1.9 $\mu\text{g}/\text{L}$ OF TOLUENE, 2.0 $\mu\text{g}/\text{L}$ OF ETHYLBENZENE.

- TRIP BLANK, EW-TBL (602) HAD A SURROGATE RECOVERY (78%) FOR TRIFLUOROTOLUENE, THE LOWER LIMIT WAS 80%.

ESTES LANDFILL DATA REVIEW

Project Number: 11322 048
Data Reviewer: M. CLINE
Date of Review: 4-4-94
Sample Matrix: AQUEOUS
Sampling Round: DECEMBER '92

x = OK

* = Problem as noted

1. Review chain of custody sheets
2. Review case narrative
3. Technical holding times met
4. Spike recoveries
5. Spike duplicate recoveries
6. % difference $\frac{MS-MSD}{1/2(MS+MSD)}$
7. Method blanks
8. Trip blanks

General comments: ANALYZED BY VISTA LABORATORIES

2. SEE ATTACHED SAMPLE DESCRIPTION WITH COMMENTS.

(601)

7. - METHOD BLANK ON 12/17/92 CONTAINED 0.36 µg/l OF CHLOROMETHANE
- METHOD BLANK (601) ON 12/18/92 CONTAINED 0.61 µg/l OF CHLOROMETHANE AND TRANS-1, 2-DICHLOROETHANE (0.25 µg/l).
- METHOD BLANK (601) ON 12/19/92 CONTAINED 0.32 µg/l OF TRANS-1, 2-DICHLOROETHANE.
- SAMPLE SB-4, MATRIX SPIKE & DUPLICATE EXCEEDED % RECOVERY LIMITS FOR TRICHLOROETHENE. RECOVERIES WERE 147% & 140% RESPECTIVELY. LIMITS WERE BOTH 133.
5. - MATRIX SPIKE DUPLICATE ON 12/19/92 (601) EXCEEDED % RECOVERY LIMITS FOR CHLORO BENZENE, LIMIT WAS 115, RECOVERY WAS 119%.

over

7. - METHOD BLANK (602) ON 12/18/92 CONTAINED 1.1 µg/l OF 1,2-DICHLOROBENZENE
5. - MATRIX SPIKE DUPLICATE (602) ON 12/18/92 (SB-4) EXCEEDED % RECOVERY LIMITS FOR TOLUENE. LIMIT = 120, RECOVERY = 121%.
- 4,5,6. - MATRIX SPIKE, ~~DUPLICATE~~, AND RPD ON 12/18/92 (602) EXCEEDED LIMITS AS FOLLOWS

<u>SPIKE</u>	<u>LIMIT</u>	<u>RECOVERY</u>
BENZENE	127	128
TOLUENE	120	123
CHLOROBENZENE	124	127

<u>RPD</u>	<u>LIMIT</u>	<u>ACTUAL</u>
BENZENE	5	9
TOLUENE	6	8
CHLOROBENZENE	6	8

7. - METHOD BLANK (8240) ON 12/17/92 CONTAINED 2.3 µg/l CHLOROMETHANE, REPORTING LIMIT WAS 10 µg/l.

4,5,6. - MATRIX SPIKE, DUPLICATE, AND RPD FOR EW-12 (8240) ON 12/17/92 WERE OUTSIDE OF THE FOLLOWING LIMITS:

	<u>SPIKE %</u>	<u>DUP %</u>	<u>RPD</u>	<u>% LIMIT</u>	<u>RPD LIMIT</u>
1,1-DICHLOROETHENE	51	49	4	60	10
BENZENE	76	*	*	88	6
TRICHLOROETHANE	45	41	9	86	5
TOLUENE	61	OK	65	84	7
CHLOROBENZENE	42	38	10	87	5

* RESULT NOT RELIABLE DUE TO SAMPLE CONTAMINATION

8. - TRIP BLANK EW-TB2 CONTAINED 17 µg/l OF 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
- TRIP BLANK EW-TB3 CONTAINED 0.21 µg/l OF CHLOROMETHANE AND 0.36 µg/l OF TRANS-1,2-DICHLOROETHENE
- TRIP BLANK EW-TB4 CONTAINED 0.73 µg/l OF CHLOROMETHANE, AND 0.43 µg/l OF TRANS-1,2-DICHLOROETHENE, AND 0.36 µg/l OF TETRACHLOROETHANE.
- TRIP BLANK EW-TB5 CONTAINED 0.89 µg/l OF CHLOROMETHANE, 4.0 µg/l OF METHYLENE CHLORIDE, 0.43 µg/l OF TRANS-1,2-DICHLOROETHENE, TRICHLOROETHENE (0.59 µg/l).

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-RW1	SB-4	SB-6	TW-1	TW-3	TW-4	TW-P
DATE SAMPLED	9/09/92	9/15/92	9/15/92	9/14/92	9/14/92	9/14/92	9/14/92
DATE ANALYZED	9/22/92	9/24/92	9/24/92	9/23/92	9/23/92	9/23/92	9/23/92
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOMETHANE	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
VINYL CHLORIDE	6,700	0.32	0.66	7.2	<0.2	.	<0.2
CHLOROETHANE	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	<20	4.9	4.4	3.2	<0.2	<0.2	<0.2
1,1-DICHLOROETHANE	<20	5.8	1.2	7.5	<0.2	<0.2	0.22
1,2-DICHLOROETHENE (CIS)	7,300	14	5.0	23	0.28	<0.2	1.8
1,2-DICHLOROETHENE (TRANS)	81	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROFORM	<20	0.96	1.4	4.1	1.2	<0.2	<0.2
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<20	1.2	3.6	0.21	<0.2	<0.2	<0.2
1,2-DICHLOROETHANE	<20	<0.2	<0.2	0.59	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	<20	1.0	0.51	0.72	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<20	<0.2	<0.2	1.7	0.55	<0.2	<0.2
1,2-DICHLOROPROPANE	<20	0.30	<0.2	<0.2	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<20	<0.2	<0.2	<0.2	<0.2	.	<0.2
TRICHLOROETHENE	<20	21	33	13	<0.2	<0.2	0.33
DIBROMOCHLOROMETHANE	<20	<0.2	<0.2	0.32	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<20	<0.2	<0.2	<0.2	<0.2	.	<0.2
1,1,2-TRICHLOROETHANE	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOFORM	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROBENZENE-601	140	<0.2	<0.2	0.58	<0.2	<0.2	0.21
DICHLORODIFLUOROMETHANE	83	0.98	0.87	3.0	<0.2	<0.2	0.23
TRICHLOROFLUOROMETHANE	25	0.49	<0.2	0.63	<0.2	.	<0.2
2-CHLOROETHYL VINYL ETHER	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<20	1.8	0.41	0.71	<0.2	<0.2	<0.2
BENZENE-602	<50	<0.5	<0.5	3.7	2.4	.	<0.5
TOLUENE-602	<50	<0.5	<0.5	4.9	4.2	.	<0.5
CHLOROBENZENE-602	100	<0.5	<0.5	<0.5	<0.5	.	<0.5
ETHYLBENZENE-602	310	<0.5	<0.5	1.4	1.1	.	<0.5
1,2-DICHLOROBENZENE-602	820	<1.0	2.1	2.1	<1.0	.	<1.0
1,3-DICHLOROBENZENE-602	<100	<1.0	<1.0	<1.0	<1.0	.	<1.0
1,4-DICHLOROBENZENE-602	<100	<1.0	<1.0	<1.0	<1.0	.	<1.0
TOTAL XYLENES-602	320	<1.0	<1.0	6.8	5.2	.	<1.0

FD = Field Duplicate, FO = Field Original

- U - Analyte not detected above reported sample quantification limit
- J - Analyte positively identified, reported concentration is approximate
- NJ - Analyte tentatively identified, reported concentration is approximate
- UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
- R - Sample results are rejected due to serious deficiencies in QC
- B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
- D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL DATE SAMPLED DATE ANALYZED SAMPLE CODE	EW-9 9/14/92 9/23/92 FO	EW-10 9/08/92 9/16/92 FO	EW-11 9/15/92 9/24/92 FO	EW-12 9/09/92 9/21/92 FO	EW-13 9/08/92 9/16/92 FO	EW-14 9/08/92 9/17/92 FO	EW-E 9/10/92 9/23/92 FO	EW-NE 9/09/92 9/21/92 FO	EW-NW 9/08/92 9/17/92 FO	EW-W 9/09/92 9/21/92 FO	EW-W 9/09/92 9/21/92 FO	EW-OE 9/09/92 9/17/92 FO
CHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
VINYL CHLORIDE	0.44	<0.2	<0.2	<0.2	<0.2	39	1,500	<0.2	0.29	9.6	9.5	0.91
CHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	<0.2	2.6	<0.2	0.50	3.1	1.1	<4.0	<0.2	<0.2	0.21	<0.2	<0.2
1,1-DICHLOROETHANE	<0.2	0.66	<0.2	0.46	0.59	1.8	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-DICHLOROETHENE (CIS)	0.45	<0.2	1.4	0.79	1.2	24	1,300	<0.2	<0.2	0.90	0.94	<0.2
1,2-DICHLOROETHENE (TRANS)	<0.2	<0.2	<0.2	<0.2	<0.2	0.30	24	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROFORM	<0.2	0.85	<0.2	<0.2	1.4	0.41	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	6.7	<0.2	<0.2	7.7	0.61	<4.0	<0.2	0.44	<0.2	<0.2	<0.2
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	<0.2	0.61	<0.2	<0.2	0.32	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROETHENE	<0.2	15	<0.2	1.8	36	2.9	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOFORM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROBENZENE-601	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	68	<0.2	<0.2	4.1	3.7	84
DICHLORODIFLUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	1.4	<4.0	<0.2	<0.2	0.45	<0.2	<0.2
TRICHLOROFUOROMETHANE	<0.2	<0.2	<0.2	<0.2	0.41	0.73	10	<0.2	<0.2	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<0.2	0.32	<0.2	<0.2	0.30	0.41	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2
BENZENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	0.62	<10	<0.5	<0.5	<0.5	<0.5	5.7
TOLUENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5
CHLOROBENZENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	57	<0.5	<0.5	2.9	2.8	66
ETHYLBENZENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	70	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	<1.0	<1.0	1.8	<1.0	<1.0	5.5	180	<1.0	<1.0	1.4	1.4	1.1
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	3.2
TOTAL XYLENES-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	34	<1.0	<1.0	<1.0	<1.0	<1.0

FD = Field Duplicate, FO = Field Original

- U - Analyte not detected above reported sample quantification limit
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- NJ - Analyte tentatively identified, reported concentration is approximate
- UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
- R - Sample results are rejected due to serious deficiencies in QC
- B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
- D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-10	EW-12	EW-13	EW-13	EW-14	EW-14	EW-E	EW-NE	EW-NW	EW-W	EW-OE	EW-RW2
DATE SAMPLED	3/02/93	3/02/93	3/02/93	3/02/93	3/02/93	3/02/93	3/05/93	3/04/93	3/03/93	3/03/93	3/05/93	3/05/93
DATE ANALYZED	3/07/93	3/08/93	3/07/93	3/07/93	3/08/93	3/08/93	3/10/93	3/10/93	3/09/93	3/11/93	3/11/93	3/11/93
SAMPLE CODE	FO	FO	FO	FD	FO	FD	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
BROMOMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
VINYL CHLORIDE	<2.0	<2.0	<2.0	<2.0	38	38	2,700	<2.0	<2.0	23	<5.0	300
CHLOROETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
1,1-DICHLOROETHENE	2.3	<1.0	2.3	2.1	1.6	1.7	<100	<1.0	<1.0	<1.0	<2.5	<20
1,1-DICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	4.6	4.3	<100	<1.0	<1.0	<1.0	<2.5	<20
1,2-DICHLOROETHENE (CIS)	<1.0	<1.0	<1.0	<1.0	55	61	2,000	<1.0	<1.0	11	<2.5	100
1,2-DICHLOROETHENE (TRANS)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
CHLOROFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2.7	<1.0	4.0	3.8	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
1,2-DICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
1,1,1-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
CARBON TETRACHLORIDE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
BROMODICHLOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
1,2-DICHLOROPROPANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
TRANS-1,3-DICHLOROPROPENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
TRICHLOROETHENE	11	<1.0	19	19	4.5	4.2	<100	<1.0	<1.0	<1.0	<2.5	<20
DIBROMOCHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
CIS-1,3-DICHLOROPROPENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
1,1,2-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
BROMOFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
1,1,2,2-TETRACHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
CHLOROBENZENE-601	<1.0	<1.0	<1.0	<1.0	2.2	2.2	220	<1.0	<1.0	24	120	<20
DICHLORODIFLUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
TRICHLOROFUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
2-CHLOROETHYL VINYL ETHER	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
TETRACHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0	<1.0	<1.0	<2.5	<20
BENZENE-602	<1.0	<1.0	<1.0	<1.0	1.1	1.2	<100	<1.0	<1.0	3.3	15	<20
TOLUENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<100	<1.0	<1.0	<1.0	<2.5	<20
CHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	2.7	2.9	290	<1.0	<1.0	26	130	25
ETHYLBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	330	<1.0	<1.0	1.3	2.8	<20
1,2-DICHLOROBENZENE-602	<2.0	<2.0	<2.0	<2.0	8.1	8.0	450	<2.0	<2.0	5.1	<5.0	43
1,3-DICHLOROBENZENE-602	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	<2.0	<5.0	<40
1,4-DICHLOROBENZENE-602	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0	<2.0	4.0	<5.0	<40
TOTAL XYLENES-602	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	210	<2.0	<2.0	<2.0	<5.0	<40

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 D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	SB-4	SB-6	TW-1	TW-3	TW-4	TW-P
DATE SAMPLED	3/03/93	3/03/93	3/08/93	3/08/93	3/08/93	3/08/93
DATE ANALYZED	3/09/93	3/09/93	3/11/93	3/11/93	3/11/93	3/11/93
SAMPLE CODE	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
BROMOMETHANE	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
VINYL CHLORIDE	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
CHLOROETHANE	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
METHYLENE CHLORIDE	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	7.3	2.9	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	6.3	<2.5	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROETHENE (CIS)	21	<2.5	<1.0	<1.0	<1.0	4.3
1,2-DICHLOROETHENE (TRANS)	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	1.3	<2.5	1.1	1.4	1.0	<1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.0	<2.5	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROETHANE	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
1,1,1-TRICHLOROETHANE	1.0	<2.5	<1.0	<1.0	<1.0	<1.0
CARBON TETRACHLORIDE	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
BROMODICHLOROMETHANE	<1.0	<2.5	<1.0	1.4	1.3	<1.0
1,2-DICHLOROPROPANE	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
TRANS-1,3-DICHLOROPROPENE	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	20	24	1.4	<1.0	<1.0	<1.0
DIBROMOCHLOROMETHANE	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
CIS-1,3-DICHLOROPROPENE	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
1,1,2-TRICHLOROETHANE	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
BROMOFORM	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
1,1,2,2-TETRACHLOROETHANE	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
CHLOROBENZENE-601	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
DICHLORODIFLUOROMETHANE	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
TRICHLOROFLUOROMETHANE	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
2-CHLOROETHYL VINYL ETHER	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
TETRACHLOROETHENE	4.9	<2.5	<1.0	<1.0	<1.0	<1.0
BENZENE-602	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
TOLUENE-602	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
CHLOROBENZENE-602	<1.0	<2.5	<1.0	<1.0	<1.0	<1.0
ETHYLBENZENE-602	<1.0	<2.5	1.8	<1.0	<1.0	1.2
1,2-DICHLOROBENZENE-602	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
1,3-DICHLOROBENZENE-602	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
1,4-DICHLOROBENZENE-602	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
TOTAL XYLENES-602	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0

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Standard report		Page 1		
TW-3		3/11/93	3/11/93	3/11/93
0	WELL	TW-3	TW-4	TW-P
0	DATE	3/08/93	3/08/93	3/08/93
0	SAMPLE CODE	FO	FO	FO
0				
1	Chloromethane	<2.0	<2.0	<2.0
2	Bromomethane	<2.0	<2.0	<2.0
3	Vinyl chloride	<2.0	<2.0	<2.0
4	Chloroethane	<2.0	<2.0	<2.0
5	Methylene chloride	<2.0	<2.0	<2.0
6	1,1-Dichloroethene	<1.0	<1.0	<1.0
7	1,1-Dichloroethane	<1.0	<1.0	<1.0
9	1,2-Dichloroethene (cis)	<1.0	<1.0	4.3
9	1,2-Dichloroethene (trans)	<1.0	<1.0	<1.0
9	Chloroform	1.4	1.0	<1.0
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0	<1.0	<1.0
11	1,2-Dichloroethane	<1.0	<1.0	<1.0
12	1,1,1-Trichloroethane	<1.0	<1.0	<1.0
13	Carbon Tetrachloride	<1.0	<1.0	<1.0
14	Bromodichloromethane	1.4	1.3	<1.0
15	1,2-Dichloropropane	<1.0	<1.0	<1.0
16	trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
17	Trichloroethene	<1.0	<1.0	<1.0
18	Dibromochloromethane	<2.0	<2.0	<2.0
19	cis-1,3-Dichloropropene	<2.0	<2.0	<2.0
20	1,1,2-Trichloroethane	<1.0	<1.0	<1.0
22	Bromoform	<1.0	<1.0	<1.0
23	1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
25	Chlorobenzene-601	<1.0	<1.0	<1.0
27	Benzene	<1.0	<1.0	<1.0
28	Toluene	<1.0	<1.0	<1.0
28	Chlorobenzene-602	<1.0	<1.0	<1.0
30	Ethyl benzene	<1.0	<1.0	1.2
31	1,3-Dichlorobenzene	<2.0	<2.0	<2.0
32	1,4-Dichlorobenzene	<2.0	<2.0	<2.0
33	1,2-Dichlorobenzene	<2.0	<2.0	<2.0
35	Dichlorodifluoromethane	<2.0	<2.0	<2.0
37	Trichlorofluoromethane	<2.0	<2.0	<2.0
41	2-Chloroethyl Vinyl Ether	<2.0	<2.0	<2.0
42	Tetrachloroethene	<1.0	<1.0	<1.0
43	Total xylenes	<2.0	<2.0	<2.0

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EW-E

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Port	Compound Name	3/10/93 19	3/10/93 20	3/11/93 21	3/11/93 22	3/11/93 23	3/11/93 24	3/11/93 25	3/11/93 26	3/11/93 27
FD = F		EW-E 3/05/93 FO	EW-NE 3/04/93 FO	EW-NW 3/03/93 FO	EW-W 3/03/93 FO	EW-OE 3/05/93 FO	EW-RW2 3/05/93 FO	SB-4 3/03/93 FO	SB-6 3/03/93 FO	TW-1 3/08/93 FO
0	WELL									
0	DATE									
0	SAMPLE CODE									
0										
1	Chloromethane	<200	<2.0	<2.0	<2.0	<5.0	<40	<2.0	<5.0	<2.0
2	Bromomethane	<200	<2.0	<2.0	<2.0	<5.0	<40	<2.0	<5.0	<2.0
3	Vinyl chloride	2,700	<2.0	<2.0	23	<5.0	300	<2.0	<5.0	<2.0
4	Chloroethane	<200	<2.0	<2.0	<2.0	<5.0	<40	<2.0	<5.0	<2.0
5	Methylene chloride	<200	<2.0	<2.0	<2.0	<5.0	<40	<2.0	<5.0	<2.0
6	1,1-Dichloroethane	<100	<1.0	<1.0	<1.0	<2.5	<20	7.3	2.9	<1.0
7	1,1-Dichloroethane	<100	<1.0	<1.0	<1.0	<2.5	<20	6.3	<2.5	<1.0
9	1,2-Dichloroethene (cis)	2,000	<1.0	<1.0	11	<2.5	100	21	<2.5	<1.0
9	1,2-Dichloroethene (trans)	<100	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
9	Chloroform	<100	<1.0	<1.0	<1.0	<2.5	<20	1.3	<2.5	1.1
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<100	<1.0	<1.0	<1.0	<2.5	<20	1.0	<2.5	<1.0
11	1,2-Dichloroethane	<100	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
12	1,1,1-Trichloroethane	<100	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
13	Carbon Tetrachloride	<100	<1.0	<1.0	<1.0	<2.5	<20	1.0	<2.5	<1.0
14	Bromodichloromethane	<100	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
15	1,2-Dichloropropane	<100	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
16	trans-1,3-Dichloropropene	<100	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
17	Trichloroethene	<100	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
18	Dibromochloromethane	<200	<2.0	<2.0	<2.0	<5.0	<40	20	24	1.4
19	cis-1,3-Dichloropropene	<200	<2.0	<2.0	<2.0	<5.0	<40	<2.0	<5.0	<2.0
20	1,1,2-Trichloroethane	<100	<1.0	<1.0	<1.0	<2.5	<40	<2.0	<5.0	<2.0
22	Bromoform	<100	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
23	1,1,2,2-Tetrachloroethane	<100	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
25	Chlorobenzene-601	220	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
27	Benzene	<100	<1.0	<1.0	24	<2.5	<20	<1.0	<2.5	<1.0
28	Toluene	<100	<1.0	<1.0	3.3	15	<20	<1.0	<2.5	<1.0
28	Chlorobenzene-602	290	<1.0	<1.0	<1.0	<2.5	<20	<1.0	<2.5	<1.0
30	Ethyl benzene	330	<1.0	<1.0	26	130	25	<1.0	<2.5	<1.0
31	1,3-Dichlorobenzene	<200	<2.0	<2.0	1.3	2.8	<20	<1.0	<2.5	1.8
32	1,4-Dichlorobenzene	<200	<2.0	<2.0	<2.0	<5.0	<40	<2.0	<5.0	<2.0
33	1,2-Dichlorobenzene	450	<2.0	<2.0	4.0	<5.0	<40	<2.0	<5.0	<2.0
35	Dichlorodifluoromethane	<200	<2.0	<2.0	5.1	<5.0	43	<2.0	<5.0	<2.0
37	Trichlorofluoromethane	<200	<2.0	<2.0	<2.0	<5.0	<40	<2.0	<5.0	<2.0
41	2-Chloroethyl Vinyl Ether	<200	<2.0	<2.0	<2.0	<5.0	<40	<2.0	<5.0	<2.0
42	Tetrachloroethene	<100	<1.0	<1.0	<1.0	<2.5	<40	<2.0	<5.0	<2.0
43	Total xylenes	210	<2.0	<2.0	<2.0	<5.0	<40	4.9	<2.5	<1.0

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Compound Name	3/8/93 10	3/10/93 11	3/8/93 12	3/11/93 13	3/11/93 14	3/7/93 15	3/8/93 16	3/7/93 17	3/8/93 18
WELL	EW-4	EW-5	EW-7	EW-8	EW-9	EW-10	EW-12	EW-13	EW-14
DATE	3/02/93	3/03/93	3/02/93	3/05/93	3/08/93	3/02/93	3/02/93	3/02/93	3/02/93
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO	FO	FO
1 Chloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2 Bromomethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
3 Vinyl chloride	3.1	230	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4 Chloroethane	<2.0	<2.0	<2.0	<2.0	13	<2.0	<2.0	<2.0	38
5 Methylene chloride	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
6 1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0
7 1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	<1.0	2.3	1.6
9 1,2-Dichloroethene (cis)	3.2	220	8.3	<1.0	<1.0	<1.0	<1.0	<1.0	4.6
9 1,2-Dichloroethene (trans)	<1.0	<1.0	<1.0	<1.0	4.7	<1.0	<1.0	<1.0	55
9 Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
10 1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11 1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	2.7	<1.0	4.0	<1.0
12 1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
13 Carbon Tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
14 Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
15 1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
16 trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
17 Trichloroethene	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
18 Dibromochloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	11	<1.0	19	4.5
19 cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
20 1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
22 Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
23 1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
25 Chlorobenzene-601	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
27 Benzene	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	2.2
28 Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1
28 Chlorobenzene-602	<1.0	14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
30 Ethyl benzene	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	2.7
31 1,3-Dichlorobenzene	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
32 1,4-Dichlorobenzene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
33 1,2-Dichlorobenzene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
35 Dichlorodifluoromethane	<2.0	34	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	8.1
37 Trichlorofluoromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
41 2-Chloroethyl Vinyl Ether	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
42 Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0
43 Total xylenes	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0

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Port FD = F1	Compound Name	3/10/93 1	3/19/93 2	3/11/93 3	3/10/93 4	EW-10 EW-13 3/17/93 5	EW-13 3/19/93 6	EW-13 3/18/93 7	EW-8 3/19/93 8	3/11/93 9
		BW-P 3/04/93 FO	BW-SD 3/04/93 FO	BW-SES 3/04/93 FO	BW-WD 3/04/93 FO	EW-1 3/02/93 FO	EW-1 3/03/93 FO	EW-2 3/02/93 FO	EW-1A 3/04/93 FO	EW-3 3/05/93 FO
0	WELL									
0	DATE									
0	SAMPLE CODE									
1	Chloromethane	<40	4.5	3.4	<20	<2.0	<2.0	<2.0	<2.0	<2.0
2	Bromomethane	<40	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0
3	Vinyl chloride	280	25	<2.0	340	<2.0	<2.0	38	<2.0	<2.0
4	Chloroethane	<40	8.1	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0
5	Methylene chloride	<40	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0
6	1,1-Dichloroethane	<20	<1.0	<1.0	<10	2.1	<1.0	<2.0	<2.0	<2.0
7	1,1-Dichloroethane	<20	3.1	<1.0	<10	<1.0	<1.0	1.7	<1.0	<1.0
9	1,2-Dichloroethene (cis)	210	50	4.5	500	<1.0	<1.0	4.3	<1.0	<1.0
9	1,2-Dichloroethene (trans)	<20	<1.0	<1.0	<10	<1.0	<1.0	61	<1.0	<1.0
9	Chloroform	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
11	1,2-Dichloroethane	<20	<1.0	<1.0	<10	3.8	<1.0	<1.0	<1.0	<1.0
12	1,1,1-Trichloroethane	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
13	Carbon Tetrachloride	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
14	Bromodichloromethane	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
15	1,2-Dichloropropane	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
16	trans-1,3-Dichloropropene	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
17	Trichloroethene	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
18	Dibromochloromethane	<40	1.5	<1.0	<10	19	<1.0	4.2	<1.0	<1.0
19	cis-1,3-Dichloropropene	<40	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0
20	1,1,2-Trichloroethane	<20	<1.0	<1.0	<10	<2.0	<2.0	<2.0	<2.0	<2.0
22	Bromoform	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
23	1,1,2,2-Tetrachloroethane	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
25	Chlorobenzene-601	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
27	Benzene	<20	7.0	7.8	17	<1.0	<1.0	<1.0	<1.0	<1.0
28	Toluene	<20	3.0	3.4	<10	<1.0	<1.0	2.2	<1.0	<1.0
28	Chlorobenzene-602	<20	<1.0	<1.0	<10	<1.0	<1.0	1.2	<1.0	<1.0
30	Ethyl benzene	21	7.9	8.5	22	<1.0	<1.0	1.1	<1.0	<1.0
31	1,3-Dichlorobenzene	<20	1.6	<1.0	<10	<1.0	<1.0	2.9	<1.0	<1.0
32	1,4-Dichlorobenzene	<40	<2.0	<2.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0
33	1,2-Dichlorobenzene	<40	2.3	7.9	<20	<2.0	<2.0	<2.0	<2.0	<2.0
35	Dichlorodifluoromethane	58	4.3	2.4	66	<2.0	<2.0	<2.0	<2.0	<2.0
37	Trichlorofluoromethane	<40	<2.0	<2.0	<20	<2.0	<2.0	8.0	<2.0	<2.0
41	2-Chloroethyl Vinyl Ether	<40	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0
42	Tetrachloroethene	<40	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0
43	Total xylenes	<20	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
		<40	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were rejected "R".

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than the upper acceptance limit as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were not qualified.

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than or equal to 10% but less than the lower acceptance limit discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were qualified as approximated "UJ".

- The SVOC surrogate recovery was less than 10% as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both was qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were rejected "R".

Comments:

Were concentrations of any analyses found in the method blanks? Yes ___ No

If yes, list the detected constituents and their associated concentration.

Comments:

Were constituent concentrations in the database found to match the raw data? Yes No ___

Identify any discrepancies.

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No /

If no, check the appropriate boxes.

601 The matrix spike (MS) performed on 3-10-93 was (circle one) less than/greater than the % accuracy limits as follows:
TRICHLOROETHENE, RECOVERY = 122, LIMIT = 117

601 The matrix spike duplicate (MSD) performed on 3-10-93 (circle one) was less than/greater than the % accuracy limits as follows:
TRICHLOROETHENE, RECOVERY = 118, LIMIT = 117

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

The analytical data were qualified for the following reason:

Comments:

Were surrogate recoveries found to be within acceptable QC limits? Yes / No ___

If no, check the appropriate boxes.

The VOC surrogate recovery was greater than the upper acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were not qualified.

The VOC surrogate recovery was greater than or equal to 10% but less than the lower acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were qualified as approximated "UJ".

The VOC surrogate recovery was less than 10% as discussed for the following samples:

ESTES LANDFILL DATA REVIEW

Project Number: 11322 048
Data Reviewer: M. CLINE
Date of Review: 4-8-94
Sample Matrix: AQUEOUS
Sampling Round: MARCH '93

x = OK

* = Problem as noted

1. Review chain of custody sheets
2. Review case narrative
3. Technical holding times met
4. Spike recoveries
5. Spike duplicate recoveries
6. % difference $\frac{MS-MSD}{1/2(MS+MSD)}$
7. Method blanks
8. Trip blanks

General comments:

4, 5. - Matrix spike $\frac{1}{2}$ duplicate exceeded % recoveries for trichloroethene on 3/10/93.

Table 1
Results of 601/602 Analyses in µg/L

WELL	BW-P	BW-SD	BW-SES	BW-WD	EW-5	EW-6	EW-8	EW-8	EW-E	EW-NE	EW-NE	EW-NW
DATE SAMPLED	12/10/92	12/10/92	12/10/92	12/10/92	12/07/92	12/07/92	12/08/92	12/08/92	12/07/92	12/07/92	12/07/92	12/07/92
DATE ANALYZED	12/20/92	12/20/92	12/20/92	12/20/92	12/18/92	12/19/92	12/19/92	12/20/92	12/20/92	12/18/92	12/18/92	12/18/92
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO	FD	FO	FO	FD	FO
CHLOROMETHANE	<2.0	0.72	0.31	<2.0	0.46	7.7	<0.2	0.70	<10	0.26	0.73	1.0
BROMOMETHANE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
VINYL CHLORIDE	270	<0.2	1.0	110	210	1,000	<0.2	<0.2	2,100	<0.2	<0.2	21
CHLOROETHANE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<20	<2.0	<2.0	<20	<2.0	<100	<2.0	<2.0	<100	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	<2.0	<0.2	0.34	<2.0	0.72	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
1,1-DICHLOROETHANE	3.3	<0.2	0.53	3.6	1.3	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
1,2-DICHLOROETHENE (CIS)	570	0.97	<0.2	290	390	1,100	<0.2	<0.2	1,900	<0.2	<0.2	<0.2
1,2-DICHLOROETHENE (TRANS)	6.1	<0.2	<0.2	2.9	5.7	47	0.24	<0.2	35	0.22	<0.2	16
CHLOROFORM	<2.0	0.30	0.24	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	0.52
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<2.0	<0.2	<0.2	<2.0	1.3	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
1,2-DICHLOROETHANE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	0.43	<0.2	<10	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
1,2-DICHLOROPROPANE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
TRICHLOROETHENE	4.0	0.23	0.70	5.8	8.7	<10	<0.2	<0.2	<10	<0.2	<0.2	0.25
DIBROMOCHLOROMETHANE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
BROMOFORM	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
CHLOROBENZENE-601	22	<0.2	<0.2	9.9	6.3	21	0.27	<0.2	42	<0.2	<0.2	0.90
DICHLORODIFLUOROMETHANE	2.3	<0.2	<0.2	2.7	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
TRICHLOROFLUOROMETHANE	2.7	<0.2	0.48	3.6	2.2	<10	<0.2	<0.2	15	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<2.0	<0.2	<0.2	<2.0	<0.2	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<2.0	<0.2	<0.2	<2.0	0.38	<10	<0.2	<0.2	<10	<0.2	<0.2	<0.2
BENZENE-602	<5.0	<0.5	<0.5	<5.0	0.62	<25	<0.5	<0.5	<25	<0.5	<0.5	0.58
TOLUENE-602	<5.0	<0.5	<0.5	<5.0	<0.5	<25	<0.5	<0.5	<25	<0.5	<0.5	<0.5
CHLOROBENZENE-602	25	<0.5	<0.5	11	7.1	31	<0.5	<0.5	55	<0.5	<0.5	1.3
ETHYLBENZENE-602	<5.0	<0.5	<0.5	<5.0	<0.5	<25	<0.5	<0.5	28	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	110	<1.0	<1.0	40	43	230	<1.0	<1.0	230	<1.0	<1.0	3.4
1,3-DICHLOROBENZENE-602	<10	<1.0	<1.0	<10	<1.0	<50	<1.0	<1.0	<50	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	<10	<1.0	<1.0	<10	2.4	<50	<1.0	<1.0	<50	<1.0	<1.0	<1.0
TOTAL XYLENES-602	<10	<1.0	<1.0	<10	<1.0	<50	<1.0	<1.0	<50	<1.0	<1.0	<1.0

- FD = Field Duplicate, FO = Field Original
 U - Analyte not detected above reported sample quantification limit
 J - Analyte positively identified, reported concentration is approximate
 NJ - Analyte tentatively identified, reported concentration is approximate
 UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
 R - Sample results are rejected due to serious deficiencies in QC
 B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
 D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-W	EW-OE	EW-RW1	EW-RW2	SB-4	SB-6	TW-1	TW-3	TW-4
DATE SAMPLED	12/07/92	12/08/92	12/08/92	12/08/92	12/04/92	12/04/92	12/03/92	12/03/92	12/03/92
DATE ANALYZED	12/20/92	12/19/92	12/20/92	12/20/92	12/18/92	12/18/92	12/17/92	12/17/92	12/17/92
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<2.0	<0.2	<10	<2.0	<0.2	0.87	0.32	0.35	<0.2
BROMOMETHANE	<2.0	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
VINYL CHLORIDE	300	0.80	1,700	420	<0.2	<0.2	0.26	1.0	0.42
CHLOROETHANE	0.94	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<20	<2.0	<100	<20	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	0.48	<0.2	<10	<2.0	5.2	11	1.4	<0.2	<0.2
1,1-DICHLOROETHANE	2.6	<0.2	<10	<2.0	3.5	1.4	4.4	<0.2	<0.2
1,2-DICHLOROETHENE (CIS)	320	0.21	2,900	310	7.2	1.8	7.8	0.97	<0.2
1,2-DICHLOROETHENE (TRANS)	6.3	0.28	35	8.7	0.28	0.26	<0.2	<0.2	<0.2
CHLOROFORM	<2.0	<0.2	<10	<2.0	1.6	2.6	3.0	<0.2	<0.2
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<2.0	<0.2	<10	<2.0	1.6	3.4	0.22	<0.2	<0.2
1,2-DICHLOROETHANE	<2.0	<0.2	<10	<2.0	0.35	0.20	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	0.36	<0.2	<10	<2.0	1.4	1.5	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<2.0	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<2.0	<0.2	<10	<2.0	0.30	0.76	0.99	<0.2	<0.2
1,2-DICHLOROPROPANE	<2.0	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<2.0	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROETHENE	0.76	<0.2	<10	<2.0	24	72	16	<0.2	<0.2
DIBROMOCHLOROMETHANE	<2.0	<0.2	<10	<2.0	<0.2	<0.2	0.26	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<2.0	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<2.0	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOFORM	<2.0	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<2.0	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROBENZENE-601	24	56	45	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
DICHLORODIFLUOROMETHANE	1.2	<0.2	<10	<2.0	<0.2	0.65	<0.2	<0.2	<0.2
TRICHLOROFLUOROMETHANE	3.0	<0.2	14	<2.0	0.30	<0.2	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<2.0	<0.2	<10	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<2.0	<0.2	<10	<2.0	2.5	0.90	0.54	<0.2	<0.2
BENZENE-602	<5.0	5.9	<25	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
TOLUENE-602	<5.0	0.87	<25	<5.0	<0.5	<0.5	0.65	<0.5	<0.5
CHLOROBENZENE-602	26	62	59	23	<0.5	<0.5	<0.5	<0.5	<0.5
ETHYLBENZENE-602	<5.0	<0.5	88	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	97	2.7	360	92	<1.0	<1.0	1.1	<1.0	<1.0
1,3-DICHLOROBENZENE-602	<10	1.3	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	<10	5.1	<50	<10	<1.0	<1.0	1.1	<1.0	<1.0
TOTAL XYLENES-602	<10	<1.0	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0

FD = Field Duplicate, FO = Field Original

- U - Analyte not detected above reported sample quantification limit
- J - Analyte positively identified, reported concentration is approximate
- NJ - Analyte tentatively identified, reported concentration is approximate
- UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
- R - Sample results are rejected due to serious deficiencies in QC
- B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
- D - Compound analyzed at greater dilution than the rest of the run

1/17/94 TW-1		Standard report		Page 1	
rt	Compound Name	12/17/92 19	12/17/92 20	12/17/92 21	
D = F					
0	WELL	TW-1	TW-3	TW-4	
0	DATE	12/03/92	12/03/92	12/03/92	
0	SAMPLE CODE	FO	FO	FO	
0					
1	Chloromethane	0.32	0.35	<0.2	
2	Bromomethane	<0.2	<0.2	<0.2	
3	Vinyl chloride	0.26	1.0	0.42	
4	Chloroethane	<0.2	<0.2	<0.2	
5	Methylene chloride	<2.0	<2.0	<2.0	
6	1,1-Dichloroethene	1.4	<0.2	<0.2	
7	1,1-Dichloroethane	4.4	<0.2	<0.2	
9	1,2-Dichloroethene (cis)	7.8	0.97	<0.2	
9	1,2-Dichloroethene (trans)	<0.2	<0.2	<0.2	
9	Chloroform	3.0	<0.2	<0.2	
10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.22	<0.2	<0.2	
11	1,2-Dichloroethane	<0.2	<0.2	<0.2	
12	1,1,1-Trichloroethane	<0.2	<0.2	<0.2	
13	Carbon Tetrachloride	<0.2	<0.2	<0.2	
14	Bromodichloromethane	0.99	<0.2	<0.2	
15	1,2-Dichloropropane	<0.2	<0.2	<0.2	
16	trans-1,3-Dichloropropene	<0.2	<0.2	<0.2	
17	Trichloroethene	16	<0.2	<0.2	
18	Dibromochloromethane	0.26	<0.2	<0.2	
19	cis-1,3-Dichloropropene	<0.2	<0.2	<0.2	
20	1,1,2-Trichloroethane	<0.2	<0.2	<0.2	
22	Bromoform	<0.2	<0.2	<0.2	
23	1,1,2,2-Tetrachloroethane	<0.2	<0.2	<0.2	
25	Chlorobenzene-601	<0.2	<0.2	<0.2	
27	Benzene	<0.5	<0.5	<0.5	
28	Toluene	0.65	<0.5	<0.5	
28	Chlorobenzene-602	<0.5	<0.5	<0.5	
30	Ethyl benzene	<0.5	<0.5	<0.5	
31	1,3-Dichlorobenzene	<1.0	<1.0	<1.0	
32	1,4-Dichlorobenzene	1.1	<1.0	<1.0	
33	1,2-Dichlorobenzene	1.1	<1.0	<1.0	
35	Dichlorodifluoromethane	<0.2	<0.2	<0.2	
37	Trichlorofluoromethane	<0.2	<0.2	<0.2	
41	2-Chloroethyl Vinyl Ether	<0.2	<0.2	<0.2	
42	Tetrachloroethene	0.54	<0.2	<0.2	
43	Total xylenes	<1.0	<1.0	<1.0	

3/17/94

EW-E

Standard report

Page 1

Port	Compound Name	12/20/92	12/18/92	12/18/92	12/20/92	12/19/92	12/20/92	12/20/92	12/18/92	12/18/92
FD = Fl		10	11	12	13	14	15	16	17	18
		EW-E	EW-NE	EW-NW	EW-W	EW-OE	EW-RW1	EW-RW2	SB-4	SB-6
		12/07/92	12/07/92	12/07/92	12/07/92	12/08/92	12/08/92	12/08/92	12/04/92	12/04/92
		FO	FO	FO	FO	FO	FO	FO	FO	FO
0	WELL									
0	DATE									
0	SAMPLE CODE									
0										
1	Chloromethane	<10	0.26	1.0	<2.0	<0.2	<10	<2.0	<0.2	0.87
2	Bromomethane	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
3	Vinyl chloride	2,100	<0.2	21	300	0.80	1,700	420	<0.2	<0.2
4	Chloroethane	<10	<0.2	<0.2	0.94	<0.2	<10	<2.0	<0.2	<0.2
5	Methylene chloride	<100	<2.0	<2.0	<20	<2.0	<100	<20	<2.0	<2.0
6	1,1-Dichloroethene	<10	<0.2	<0.2	0.48	<0.2	<10	<2.0	5.2	11
7	1,1-Dichloroethane	<10	<0.2	<0.2	2.6	<0.2	<10	<2.0	3.5	1.4
9	1,2-Dichloroethene (cis)	1,900	<0.2	16	320	0.21	2,900	310	7.2	1.8
9	1,2-Dichloroethene (trans)	35	0.22	0.52	6.3	0.28	35	8.7	0.28	0.26
9	Chloroform	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	1.6	2.6
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	1.6	3.4
11	1,2-Dichloroethane	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	0.35	0.20
12	1,1,1-Trichloroethane	<10	<0.2	<0.2	0.36	<0.2	<10	<2.0	1.4	1.5
13	Carbon Tetrachloride	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
14	Bromodichloromethane	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	0.30	0.76
15	1,2-Dichloropropane	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
16	trans-1,3-Dichloropropene	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
17	Trichloroethene	<10	<0.2	0.25	0.76	<0.2	<10	<2.0	24	72
18	Dibromochloromethane	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
19	cis-1,3-Dichloropropene	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
20	1,1,2-Trichloroethane	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
22	Bromoform	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
23	1,1,2,2-Tetrachloroethane	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
25	Chlorobenzene-601	42	<0.2	0.90	24	<0.2	<10	<2.0	<0.2	<0.2
27	Benzene	<25	<0.5	0.58	5.0	56	45	<2.0	<0.2	<0.2
28	Toluene	<25	<0.5	<0.5	<5.0	5.9	<25	<5.0	<0.5	<0.5
28	Chlorobenzene-602	55	<0.5	1.3	26	0.87	<25	<5.0	<0.5	<0.5
30	Ethyl benzene	28	<0.5	<0.5	<5.0	62	59	23	<0.5	<0.5
31	1,3-Dichlorobenzene	<50	<1.0	<1.0	<10	1.3	88	<5.0	<0.5	<0.5
32	1,4-Dichlorobenzene	<50	<1.0	<1.0	<10	5.1	<50	<10	<1.0	<1.0
33	1,2-Dichlorobenzene	230	<1.0	3.4	97	2.7	<50	<10	<1.0	<1.0
35	Dichlorodifluoromethane	<10	<0.2	<0.2	1.2	<0.2	360	92	<1.0	<1.0
37	Trichlorofluoromethane	15	<0.2	<0.2	3.0	<0.2	<10	<2.0	<0.2	0.65
41	2-Chloroethyl Vinyl Ether	<10	<0.2	<0.2	<2.0	<0.2	14	<2.0	0.30	<0.2
42	Tetrachloroethene	<10	<0.2	<0.2	<2.0	<0.2	<10	<2.0	<0.2	<0.2
43	Total xylenes	<50	<1.0	<1.0	<10	<1.0	<50	<10	2.5	0.90

/17/94 BW-P		Standard report		Page 1		12/20/92		12/18/92		12/19/92	
rt	Compound Name	1	2	3	4	5	6	7	8	9	
0	WELL	BW-P	BW-SD	BW-BES	BW-WD	BW-2	BW-NE	BW-3	BW-B	BW-5	BW-6
0	DATE	12/10/92	12/10/92	12/10/92	12/10/92	12/07/92	12/07/92	12/08/92	12/07/92	12/07/92	12/08/92
0	SAMPLE CODE	FO	FO	FO	FO	FD	FD	FD	FO	FO	
1	Chloromethane	<2.0	0.72	0.31	<2.0	0.73	0.70	0.46	7.7	<0.2	
2	Bromomethane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
3	Vinyl chloride	270	<0.2	1.0	110	<0.2	<0.2	210	1,000	<0.2	
4	Chloroethane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
5	Methylene chloride	<20	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<100	<2.0	
6	1,1-Dichloroethane	<2.0	<0.2	0.34	<2.0	<0.2	<0.2	0.72	<10	<0.2	
7	1,1-Dichloroethane	3.3	<0.2	0.53	3.6	<0.2	<0.2	1.3	<10	<0.2	
9	1,2-Dichloroethane (cis)	570	0.97	<0.2	290	<0.2	<0.2	390	1,100	<0.2	
9	1,2-Dichloroethane (trans)	6.1	<0.2	<0.2	2.9	<0.2	<0.2	5.7	47	0.24	
9	Chloroform	<2.0	0.30	0.24	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	1.3	<10	<0.2	
11	1,2-Dichloroethane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
12	1,1,1-Trichloroethane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
13	Carbon Tetrachloride	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	0.43	
14	Bromodichloromethane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
15	1,2-Dichloropropane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
16	trans-1,3-Dichloropropene	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
17	Trichloroethene	4.0	0.23	0.70	5.8	<0.2	<0.2	8.7	<10	<0.2	
18	Dibromochloromethane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
19	cis-1,3-Dichloropropene	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
20	1,1,2-Trichloroethane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
22	Bromoform	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
23	1,1,2,2-Tetrachloroethane	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
25	Chlorobenzene-601	22	<0.2	<0.2	9.9	<0.2	<0.2	6.3	21	0.27	
27	Benzene	<5.0	<0.5	<0.5	<5.0	<0.5	<0.5	0.62	<25	<0.5	
28	Toluene	<5.0	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<25	<0.5	
28	Chlorobenzene-602	25	<0.5	<0.5	11	<0.5	<0.5	7.1	31	<0.5	
30	Ethyl benzene	<5.0	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<25	<0.5	
31	1,3-Dichlorobenzene	<10	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<50	<1.0	
32	1,4-Dichlorobenzene	<10	<1.0	<1.0	<10	<1.0	<1.0	2.4	<50	<1.0	
33	1,2-Dichlorobenzene	110	<1.0	<1.0	40	<1.0	<1.0	43	230	<1.0	
35	Dichlorodifluoromethane	2.3	<0.2	<0.2	2.7	<0.2	<0.2	<0.2	<10	<0.2	
37	Trichlorofluoromethane	2.7	<0.2	0.48	3.6	<0.2	<0.2	2.2	<10	<0.2	
41	2-Chloroethyl Vinyl Ether	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<10	<0.2	
42	Tetrachloroethene	<2.0	<0.2	<0.2	<2.0	<0.2	<0.2	0.38	<10	<0.2	
43	Total xylenes	<10	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<50	<1.0	

Sample Description, cont.

<u>Laboratory ID</u>	<u>Client ID</u>	<u>Type</u>	<u>Date Received</u>
925646-026	EW-5	Water	12/08/92
925646-027	EW-E	Water	12/08/92
925646-027D	EW-ELD	Water	12/08/92
925646-028	EW-W	Water	12/08/92
925646-029	EW-FB2	Water	12/08/92
925646-030	EW-TB5	Water	12/09/92
925646-031	EW-RW1	Water	12/09/92
925646-032	EW-RW2	Water	12/09/92
925646-033	EW-OE	Water	12/09/92
925646-034	EW-FD3	Water	12/09/92
925646-035	EW-8	Water	12/09/92
925646-036	EW-TB6	Water	12/11/92
925646-037	EW-6	Water	12/11/92
925646-038	BW-P	Water	12/11/92
925646-039	BW-WD	Water	12/11/92
925646-040	BW-SES	Water	12/11/92
925646-041	BW-SD	Water	12/11/92

- THE LABORATORY CONTROL SAMPLE FOR 12/17/92 ALSO SHOWED A BENZENE CARRY OVER PROBLEM. A SUBSEQUENT LABORATORY BLANK SPIKE AND BLANK SPIKE DUPLICATE WERE IN CONTROL LIMITS.

- VOLATILES SPIKE SHOWED A HIGH RECOVERY FOR TRICHLOROETHYLENE. A BLANK SAMPLE ANALYZED THE SAME DAY WAS WITHIN CONTROL LIMITS. THE BLANK SPIKE ANALYZED ON 12/17/92 SHOWED A HIGH RECOVERY FOR CHLOROBENZENE IN THE SPIKE DUPLICATE. THE SAMPLE HAD BEEN ACCEPTED AS IN CONTROL PRIOR TO RECALCULATING THE VOA RESULTS.

- TOLUENE SPIKE RECOVERY WAS HIGH. THIS SAMPLE HAD ALSO BEEN ACCEPTED AS IN CONTROL PRIOR TO RECALCULATING THE VOA RESULTS. THE BLANK SPIKE ANALYZED ON 12/18/92 SHOWED HIGH RECOVERIES FOR ALL SPIKE COMPOUNDS. THE BLANK SPIKE DUPLICATE WAS IN CONTROL ALTHOUGH THE RPD'S WERE ABOVE LIMITS. THE SAMPLE WAS NOT REANALYZED.

2. - CASE NARRATIVE

Sample Description

<u>Laboratory ID</u>	<u>Client ID</u>	<u>Type</u>	<u>Date Received</u>
925646-001	EW-TB1	Water	12/03/92
925646-002	EW-13	Water	12/03/92
925646-003	EW-FB1	Water	12/03/92
925646-004	EW-10	Water	12/03/92
925646-005	EW-FD1	Water	12/03/92
925646-006	EW-12	Water	12/03/92
925646-006S	EW-12LS	Water	12/03/92
925646-007	EW-7	Water	12/03/92
925646-008	EW-14	Water	12/03/92
925646-008D	EW-14LD	Water	12/03/92
925646-009	EW-4	Water	12/03/92
925646-010	EW-FB3	Water	12/03/92
925646-011	EW-TB2	Water	12/04/92
925646-012	TW-4	Water	12/04/92
925646-013	TW-3	Water	12/04/92
925646-014	TW-1	Water	12/04/92
925646-015	TW-P	Water	12/04/92
925646-016	EW-1	Water	12/04/92
925646-016S	EW-1LS	Water	12/04/92
925646-017	EW-9	Water	12/04/92
925646-017S	EW-9LS	Water	12/04/92
925646-018	EW-TB3	Water	12/07/92
925646-019	SB-4	Water	12/07/92
925646-020	SB-6	Water	12/07/92
925646-021	EW-TB4	Water	12/08/92
925646-022	EW-NW	Water	12/08/92
925646-023	EW-NE	Water	12/08/92
925646-024	EW-FD2	Water	12/08/92
925646-025	EW-6	Water	12/08/92
925646-025D	EW-6LD	Water	12/08/92

- ANALYZED BY 3240 TO MEET HOLDING TIMES

- ANALYZED OUT OF HOLDING TIME

- LABS BLANK SPIKES EXCEEDED HOLDING TIMES AND WERE NOT ANALYZED.

- VOLATILES SURROGATE RECOVERIES WERE HIGH.

- VOLATILE SPIKE RECOVERIES WERE ERRATIC DUE TO CAPILLARY...

8. - TRIPBLANK EW-TB6 CONTAINED 0.69 $\mu\text{g/l}$ OF CHLOROMETHANE,
0.25 $\mu\text{g/l}$ OF TRANS-1, 2- DICHLOROETHENE, 7.3 $\mu\text{g/l}$ CHLOROFORM,
0.47 $\mu\text{g/l}$ OF BROMODICHLOROMETHANE

FIELD BLANK EW-FB1 CONTAINED 2.8 $\mu\text{g/l}$ OF CHLOROFORM. REPORTING
LIMIT = 5 $\mu\text{g/l}$

FIELD BLANK EW-FB2 CONTAINED 0.28 $\mu\text{g/l}$ OF CHLOROMETHANE, 3.5 $\mu\text{g/l}$ OF
METHYLENE CHLORIDE, AND 0.24 $\mu\text{g/l}$ OF TRANS-1, 2- DICHLOROETHENE. AND
EXCEEDED THE SURROGATE RECOVERY FOR TOLUENE- d_8 . RECOVERY = 133%,
LIMIT = 129%.

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were rejected "R".

- Two or more SVOC surrogates in the same semivolatle fraction have a recovery greater than the upper acceptance limit as discussed for the following samples:

The semivolatle fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were not qualified.

- Two or more SVOC surrogates in the same semivolatle fraction have a recovery greater than or equal to 10% but less than the lower acceptance limit discussed for the following samples:

The semivolatle fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were qualified as approximated "UJ".

- The SVOC surrogate recovery was less than 10% as discussed for the following samples:

The semivolatle fraction for acid, base/neutral, or both was qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were rejected "R".

Comments:

Were concentrations of any analyses found in the method blanks? Yes No

If yes, list the detected constituents and their associated concentration.

Comments: *SEE COMMENTS ON FIRST PAGE*

Were constituent concentrations in the database found to match the raw data? Yes No

Identify any discrepancies.

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No /

If no, check the appropriate boxes.

12/18/92

(601) The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:
TRICHLOROETHENE, RECOVERY = 147, LIMIT = 133

(601) The matrix spike duplicate (MSD) performed on 12/18/92 (circle one) was less than/greater than the % accuracy limits as follows:
TRICHLOROETHENE, RECOVERY = 140, LIMIT = 133

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

? The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No /

If no, check the appropriate boxes.

The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:

(601) The matrix spike duplicate (MSD) performed on 12/19/92 (circle one) was less than/greater than the % accuracy limits as follows:
CHLOROBENZENE, RECOVERY = 119, LIMIT = 115

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No

If no, check the appropriate boxes.

The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:

The matrix spike duplicate (MSD) performed on 12/18/92 (circle one) was less than/greater than the % accuracy limits as follows:

(602)
(SBA)

TOLUENE, RECOVERY = 121%, LIMIT = 120

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No

If no, check the appropriate boxes.

The matrix spike (MS) performed on 12/18/92 was (circle one) less than/greater than the % accuracy limits as follows:

BENZENE, RECOVERY = 128 LIMIT = 127

TOLUENE, RECOVERY = 123 LIMIT = 120

CHLOROBENZENE, RECOVERY = 127 LIMIT = 124

The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

BENZENE RPD = 9 LIMIT = 5

TOLUENE RPD = 8 LIMIT = 6

CHLOROBENZENE RPD = 8 LIMIT = 6

?

The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes No

If no, check the appropriate boxes.

The matrix spike (MS) performed on 12-17-92 was (circle one) less than greater than the % accuracy limits as follows:

<u>1,1-DICHLOROETHENE</u> , REC = <u>51</u> LIMIT = <u>60</u>	<u>TOLUENE</u> , REC = <u>61</u> LIMIT = <u>84</u>
<u>BENZENE</u> , REC = <u>76</u> LIMIT = <u>88</u>	<u>CHLOROBENZENE</u> , REC = <u>42</u> LIMIT = <u>87</u>
<u>TRICHLOROETHANE</u> , REC = <u>45</u> LIMIT = <u>86</u>	

The matrix spike duplicate (MSD) performed on 12-17-92 (circle one) was less than/greater than the % accuracy limits as follows:

<u>1,1-DICHLOROETHENE</u> , REC = <u>49</u> LIMIT = <u>60</u>	
<u>TRICHLOROETHANE</u> , REC = <u>41</u> LIMIT = <u>86</u>	<u>CHLOROBENZENE</u> , REC = <u>38</u> LIMIT = <u>87</u>

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

	<u>TOLUENE</u> , RPD = <u>65</u> LIMIT = <u>7</u>
<u>TRICHLOROETHANE</u> , RPD = <u>9</u> LIMIT = <u>5</u>	<u>CHLOROBENZENE</u> , RPD = <u>10</u> LIMIT = <u>5</u>

The analytical data were qualified for the following reason:

Comments: MATRIX SPIKE DUPLICATE RESULTS WERE NOTED AS NOT RELIABLE DUE TO SAMPLE CONTAMINATION.

Were surrogate recoveries found to be within acceptable QC limits? Yes No

If no, check the appropriate boxes.

The VOC surrogate recovery was greater than the upper acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were not qualified.

The VOC surrogate recovery was greater than or equal to 10% but less than the lower acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were qualified as approximated "UJ".

The VOC surrogate recovery was less than 10% as discussed for the following samples:

Table 1
Results of 601/602 Analyses in µg/L

WELL	BW-P	BW-SD	BW-SES	BW-WD	EW-1	EW-4	EW-5	EW-6	EW-6	EW-7	EW-7	EW-8
DATE SAMPLED	9/10/92	9/10/92	9/10/92	9/10/92	9/08/92	9/15/92	9/15/92	9/09/92	9/09/92	9/08/92	9/08/92	9/10/92
DATE ANALYZED	9/22/92	9/22/92	9/23/92	9/22/92	9/17/92	9/22/92	9/24/92	9/22/92	9/22/92	9/17/92	9/17/92	9/23/92
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO	FO	FD	FO	FD	FO
CHLOROMETHANE	<0.2	<0.2	<0.2	<0.4	<0.2	0.24	<0.4	<20	<20	<0.2	<0.2	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
VINYL CHLORIDE	51	2.2	<0.2	85	<0.2	5.4	71	3,600	3,600	2.3	0.86	1.4
CHLOROETHANE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<4.0	<200	<200	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	<0.2	0.51	0.27	0.73	<0.2	<0.2	<0.4	<20	<20	0.62	0.60	<0.2
1,1-DICHLOROETHANE	1.4	0.95	0.40	2.5	<0.2	<0.2	<0.4	<20	<20	0.59	0.55	<0.2
1,2-DICHLOROETHENE (CIS)	93	46	0.89	270	<0.2	2.0	180	6,700	6,800	8.2	7.8	0.22
1,2-DICHLOROETHENE (TRANS)	0.97	<0.2	<0.2	2.1	<0.2	<0.2	1.5	71	71	<0.2	<0.2	<0.2
CHLOROFORM	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	0.31	0.33	<0.2
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	0.34	<0.2	0.92	0.57	<0.2	0.51	<20	<20	1.2	1.1	<0.2
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	0.36
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
TRICHLOROETHENE	0.23	3.0	0.64	5.4	<0.2	<0.2	3.3	<20	<20	2.6	2.4	<0.2
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
BROMOFORM	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
CHLOROBENZENE-601	8.6	0.45	<0.2	9.3	<0.2	<0.2	4.8	130	150	<0.2	<0.2	<0.2
DICHLORODIFLUOROMETHANE	0.51	1.4	0.55	6.5	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
TRICHLOROFUOROMETHANE	0.50	0.40	<0.2	2.7	<0.2	<0.2	0.83	29	32	0.32	0.32	<0.2
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.4	<20	<20	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<0.2	0.24	<0.2	0.24	<0.2	<0.2	<0.4	<20	<20	0.26	0.29	<0.2
BENZENE-602	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<1.0	<50	<0.5	<0.5	<0.5	<0.5
TOLUENE-602	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<1.0	<50	<0.5	<0.5	<0.5	<0.5
CHLOROBENZENE-602	6.8	<0.5	<0.5	7.9	<0.5	<0.5	4.2	120	120	<0.5	<0.5	<0.5
ETHYLBENZENE-602	0.76	<0.5	<0.5	<1.0	<0.5	<0.5	<1.0	210	250	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	22	2.0	<1.0	27	<1.0	1.6	14	900	1,100	<1.0	<1.0	<1.0
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<2.0	<100	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	2.4	<1.0	<1.0	2.9	<1.0	<1.0	<2.0	<100	<1.0	<1.0	<1.0	<1.0
TOTAL XYLENES-602	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<2.0	170	200	<1.0	<1.0	<1.0

- FD = Field Duplicate, FO = Field Original
 U - Analyte not detected above reported sample quantification limit
 J - Analyte positively identified, reported concentration is approximate
 NJ - Analyte tentatively identified, reported concentration is approximate
 UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
 R - Sample results are rejected due to serious deficiencies in QC
 B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
 D - Compound analyzed at greater dilution than the rest of the run

5/17/94 SB-6		Standard report		Page 1	
Port	Compound Name	9/21/92	9/23/92	9/23/92	9/23/92
D = FI		28	29	30	31
0	WELL	SB-6	TW-1	TW-3	TW-P
0	DATE	9/15/92	9/14/92	9/14/92	9/14/92
0	SAMPLE CODE	FO	FO	FO	FO
0					
1	Chloromethane	<0.2	<0.2	<0.2	<0.2
2	Bromomethane	<0.2	<0.2	<0.2	<0.2
3	Vinyl chloride	0.66	7.2	<0.2	<0.2
4	Chloroethane	<0.2	<0.2	<0.2	<0.2
5	Methylene chloride	<2.0	<2.0	<2.0	<2.0
6	1,1-Dichloroethene	4.4	3.2	<0.2	<0.2
7	1,1-Dichloroethane	1.2	7.5	<0.2	0.22
9	1,2-Dichloroethene (cis)	5.0	23	0.28	1.8
9	1,2-Dichloroethene (trans)	<0.2	<0.2	<0.2	<0.2
9	Chloroform	1.4	4.1	1.2	<0.2
10	1,1,2-Trichloro-1,2,2-trifluoroethane	3.6	0.21	<0.2	<0.2
11	1,2-Dichloroethane	<0.2	0.59	<0.2	<0.2
12	1,1,1-Trichloroethane	0.51	0.72	<0.2	<0.2
13	Carbon Tetrachloride	<0.2	<0.2	<0.2	<0.2
14	Bromodichloromethane	<0.2	1.7	0.55	<0.2
15	1,2-Dichloropropane	<0.2	<0.2	<0.2	<0.2
16	trans-1,3-Dichloropropene	<0.2	<0.2	<0.2	<0.2
17	Trichloroethene	33	13	<0.2	0.33
18	Dibromochloromethane	<0.2	0.32	<0.2	<0.2
19	cis-1,3-Dichloropropene	<0.2	<0.2	<0.2	<0.2
20	1,1,2-Trichloroethane	<0.2	<0.2	<0.2	<0.2
22	Bromoform	<0.2	<0.2	<0.2	<0.2
23	1,1,2,2-Tetrachloroethane	<0.2	<0.2	<0.2	<0.2
25	Chlorobenzene-601	<0.2	0.58	<0.2	0.21
27	Benzene	<0.5	3.7	2.4	<0.5
28	Toluene	<0.5	4.9	4.2	<0.5
28	Chlorobenzene-602	<0.5	<0.5	<0.5	<0.5
30	Ethyl benzene	<0.5	1.4	1.1	<0.5
31	1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
32	1,4-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
33	1,2-Dichlorobenzene	2.1	2.1	<1.0	<1.0
35	Dichlorodifluoromethane	0.87	3.0	<0.2	0.23
37	Trichlorofluoromethane	<0.2	0.63	<0.2	<0.2
41	2-Chloroethyl Vinyl Ether	<0.2	<0.2	<0.2	<0.2
42	Tetrachloroethene	0.41	0.71	<0.2	<0.2
43	Total xylenes	<1.0	6.8	5.2	<1.0

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Port	Compound Name	9/10/92	9/17/92	9/23/92	9/21/92	9/17/92	9/21/92	9/17/92	9/22/92	9/24/92
FD #	Fl	19	20	21	22	23	24	25	26	27
		EW-13	EW-14	EW-E	EW-NE	EW-NW	EW-W	EW-OE	EW-RW1	SB-4
		9/08/92	9/08/92	9/10/92	9/09/92	9/08/92	9/09/92	9/09/92	9/09/92	9/15/92
		FO	FO	FO	FO	FO	FO	FO	FO	FO
0	WELL									
0	DATE									
0	SAMPLE CODE									
0										
1	Chloromethane	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
2	Bromomethane	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
3	Vinyl chloride	<0.2	39	1,500	<0.2	0.29	9.6	0.91	6,700	0.32
4	Chloroethane	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
5	Methylene chloride	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0	<200	<2.0
6	1,1-Dichloroethane	3.1	1.1	<4.0	<0.2	<0.2	0.21	<0.2	<20	4.9
7	1,1-Dichloroethane	0.59	1.8	<4.0	<0.2	<0.2	<0.2	<0.2	<20	5.8
9	1,2-Dichloroethane (cis)	1.2	24	1,300	<0.2	<0.2	0.90	<0.2	7,300	14
9	1,2-Dichloroethane (trans)	<0.2	0.30	24	<0.2	<0.2	<0.2	<0.2	81	<0.2
9	Chloroform	1.4	0.41	<4.0	<0.2	<0.2	<0.2	<0.2	<20	0.96
10	1,1,2-Trichloro-1,2,2-trifluoroethane	7.7	0.61	<4.0	<0.2	0.44	<0.2	<0.2	<20	1.2
11	1,2-Dichloroethane	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
12	1,1,1-Trichloroethane	0.32	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	1.0
13	Carbon Tetrachloride	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
14	Bromodichloromethane	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
15	1,2-Dichloropropane	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
16	trans-1,3-Dichloropropene	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	0.30
17	Trichloroethene	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
18	Dibromochloromethane	36	2.9	<4.0	<0.2	<0.2	<0.2	<0.2	<20	21
19	cis-1,3-Dichloropropene	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
20	1,1,2-Trichloroethane	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
22	Bromoform	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
23	1,1,2,2-Tetrachloroethane	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
25	Chlorobenzene-601	<0.2	<0.2	68	<0.2	<0.2	<0.2	<0.2	<20	<0.2
27	Benzene	<0.5	0.62	<10	<0.5	<0.5	4.1	84	140	<0.2
28	Toluene	<0.5	<0.5	<10	<0.5	<0.5	<0.5	5.7	<50	<0.5
28	Chlorobenzene-602	<0.5	1.7	57	<0.5	<0.5	<0.5	<0.5	<50	<0.5
30	Ethyl benzene	<0.5	<0.5	70	<0.5	<0.5	2.9	66	100	<0.5
31	1,3-Dichlorobenzene	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	<100	<1.0
32	1,4-Dichlorobenzene	<1.0	<1.0	<20	<1.0	<1.0	<1.0	3.2	<100	<1.0
33	1,2-Dichlorobenzene	<1.0	5.5	180	<1.0	<1.0	1.4	1.1	820	<1.0
35	Dichlorodifluoromethane	<0.2	1.4	<4.0	<0.2	<0.2	0.45	<0.2	83	0.98
37	Trichlorofluoromethane	0.41	0.73	10	<0.2	<0.2	<0.2	<0.2	25	0.49
41	2-Chloroethyl Vinyl Ether	<0.2	<0.2	<4.0	<0.2	<0.2	<0.2	<0.2	<20	<0.2
42	Tetrachloroethene	0.30	0.41	<4.0	<0.2	<0.2	<0.2	<0.2	<20	1.8
43	Total xylenes	<1.0	<1.0	34	<1.0	<1.0	<1.0	<1.0	320	<1.0

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EW-7 FD EW-6 FD EW-W FD

Port	Compound Name	9/22/92	9/23/92	9/22/92	9/23/92	9/22/92	9/17/92	9/17/92	9/22/92	9/21/92
FD = Fl		1	2	3	4	5	6	7	8	9
		BW-P	TW4	BW-SD	BW-SES	BW-WD	BW-1	BW-1	BW-2	BW-3
		9/10/92	9/14/92	9/10/92	9/10/92	9/10/92	9/08/92	9/08/92	9/09/92	9/09/92
		FO	FO	FO	FO	FO	FO	FD	(FD)	FD
0	WELL									
0	DATE									
0	SAMPLE CODE									
0										
1	Chloromethane	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
2	Bromomethane	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
3	Vinyl chloride	51	0.25	2.2	<0.2	85	<0.2	0.86	3,600	9.5
4	Chloroethane	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
5	Methylene chloride	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<200	<2.0
6	1,1-Dichloroethene	<0.2	<0.2	0.51	0.27	0.73	<0.2	0.60	<20	<0.2
7	1,1-Dichloroethane	1.4	<0.2	0.95	0.40	2.5	<0.2	0.55	<20	<0.2
9	1,2-Dichloroethene (cis)	93	<0.2	46	0.89	270	<0.2	7.8	6,800	0.94
9	1,2-Dichloroethene (trans)	0.97	<0.2	<0.2	<0.2	2.1	<0.2	<0.2	71	<0.2
9	Chloroform	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	0.33	<20	<0.2
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<0.2	<0.2	0.34	<0.2	0.92	0.57	1.1	<20	<0.2
11	1,2-Dichloroethane	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
12	1,1,1-Trichloroethane	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
13	Carbon Tetrachloride	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
14	Bromodichloromethane	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
15	1,2-Dichloropropane	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
16	trans-1,3-Dichloropropene	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
17	Trichloroethene	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
18	Dibromochloromethane	0.23	<0.2	3.0	0.64	5.4	<0.2	<0.2	<20	<0.2
19	cis-1,3-Dichloropropene	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	2.4	<20	<0.2
20	1,1,2-Trichloroethane	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
22	Bromoform	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
23	1,1,2,2-Tetrachloroethane	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
25	Chlorobenzene-601	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
27	Benzene	8.6	<0.2	0.45	<0.2	9.3	<0.2	<0.2	<20	<0.2
28	Toluene	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	150	3.7
28	Chlorobenzene-602	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5
30	Ethyl benzene	6.8	<0.5	<0.5	<0.5	7.9	<0.5	<0.5	<0.5	<0.5
31	1,3-Dichlorobenzene	0.76	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	120	2.8
32	1,4-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<0.5	250	<0.5
33	1,2-Dichlorobenzene	2.4	<1.0	<1.0	<1.0	2.9	<1.0	<1.0	<1.0	<1.0
35	Dichlorodifluoromethane	22	<1.0	2.0	<1.0	27	<1.0	<1.0	<1.0	<1.0
37	Trichlorofluoromethane	0.51	<0.2	1.4	0.55	6.5	<0.2	<1.0	1,100	1.4
41	2-Chloroethyl Vinyl Ether	0.50	<0.2	0.40	<0.2	2.7	<0.2	0.32	<20	<0.2
42	Tetrachloroethene	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<20	<0.2
43	Total xylenes	<0.2	<0.2	0.24	<0.2	0.24	<0.2	0.29	<20	<0.2
		<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	200	<1.0

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were rejected "R".

- Two or more SVOC surrogates in the same semivolatle fraction have a recovery greater than the upper acceptance limit as discussed for the following samples:

The semivolatle fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were not qualified.

- Two or more SVOC surrogates in the same semivolatle fraction have a recovery greater than or equal to 10% but less than the lower acceptance limit discussed for the following samples:

The semivolatle fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were qualified as approximated "UJ".

- The SVOC surrogate recovery was less than 10% as discussed for the following samples:

The semivolatle fraction for acid, base/neutral, or both was qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were rejected "R".

Comments:

Were concentrations of any analyses found in the method blanks? Yes No

If yes, list the detected constituents and their associated concentration.

Comments:

METHOD BLANK ON 9-21-92 CONTAINED 2.2, µg/L OF METHYLENE CHLORIDE

Were constituent concentrations in the database found to match the raw data? Yes No

Identify any discrepancies.

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No /

If no, check the appropriate boxes.

The matrix spike (MS) performed on ^{9-16-92 >}~~9-22-92 >~~ 9-16-92 was (circle one) less than/greater than the % accuracy limits as follows:
SEE EXPLANATION UNDER GENERAL COMMENTS

The matrix spike duplicate (MSD) performed on ⁹⁻¹⁶⁻⁹²~~9-22-92~~ (circle one) was less than/greater than the % accuracy limits as follows:
SEE EXPLANATION UNDER GENERAL COMMENTS

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:
RPD ON 9-16-92 FOR TRICHLOROETHENE WAS 41, LIMIT WAS 11

? The analytical data were qualified for the following reason:

Comments:

Were surrogate recoveries found to be within acceptable QC limits? Yes / No ___

If no, check the appropriate boxes.

The VOC surrogate recovery was greater than the upper acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were not qualified.

The VOC surrogate recovery was greater than or equal to 10% but less than the lower acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were qualified as approximated "UJ".

The VOC surrogate recovery was less than 10% as discussed for the following samples:

ESTES LANDFILL DATA REVIEW

Project Number: 11322 048
Data Reviewer: M. CLINE
Date of Review: 4-4-94
Sample Matrix: AQUEOUS
Sampling Round: SEPTEMBER, '92

x = OK

* = Problem as noted

1. Review chain of custody sheets
2. Review case narrative
3. Technical holding times met
4. Spike recoveries
5. Spike duplicate recoveries
6. % difference $\frac{MS-MSD}{1/2(MS+MSD)}$
7. Method blanks
8. Trip blanks

General comments: ANALYZED BY VISTA LABORATORIES

7. - METHOD BLANK ON 9-21-92 CONTAINED 2.2 $\mu\text{g}/\text{L}$ OF METHYLENE CHLORIDE
4. - MATRIX SPIKE ON 9-16-92 WAS 136% RECOVERY FOR CHLOROBENZENE, LIMIT WAS 115.
1. - MATRIX SPIKE ON 9-22-92 WAS 126% RECOVERY FOR CHLOROBENZENE, LIMIT WAS 115.
5. - MATRIX SPIKE DUPLICATE ON 9-16-92 WAS 136% RECOVERY FOR CHLOROBENZENE, WAS 115.
6. - RPD ON 9-16-92 FOR TRICHLOROETHENE WAS 41, LIMIT WAS 11.
4. - MATRIX SPIKE DUPLICATE ON 9-22-92 WAS 126% RECOVERY FOR CHLOROBENZENE, LIMIT WAS 115.
- MATRIX SPIKE ON 9-22-92 WAS 116% RECOVERY FOR CHLOROBENZENE, LIMIT WAS 115.
5. - MATRIX SPIKE DUPLICATE ON 9-22-92 WAS: 120% RECOVERY FOR CHLOROBENZENE, LIMIT WAS 11.
- MATRIX SPIKE (602) ON 9-16-92 WAS 81% RECOVERY FOR BENZENE, LOWER LIMIT WAS 82 OVER

* - FIELD BLANK EW-FB1 CONTAINED 2.3 $\mu\text{g/l}$ OF METHYLENE CHLORIDE.
- FIELD BLANK EW-FB2 " 2.5 $\mu\text{g/l}$ " " "

- FIELD BLANK EW-FB3 CONTAINED 0.55 $\mu\text{g/l}$ OF CHLOROFORM

B. - TRIP BLANK EW-TB1 CONTAINED 2.7 $\mu\text{g/l}$ OF METHYLENE CHLORIDE

- " " EW-TB2 " 2.4 $\mu\text{g/l}$ " " "

- TRIP BLANK EW-TB3 CONTAINED 0.25 $\mu\text{g/l}$ OF VINYL CHLORIDE AND 0.55 $\mu\text{g/l}$ OF CIS-1, 2-DICHLOROETHENE.

- TRIP BLANK EW-TB5 CONTAINED 2.3 $\mu\text{g/l}$ OF METHYLENE CHLORIDE

- TRIP BLANK EW-TB6 CONTAINED 2.3 $\mu\text{g/l}$ OF METHYLENE CHLORIDE

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-OE	SB-4	SB-6	TW-1	TW-3	TW-4	TW-P
DATE SAMPLED	5/05/92	6/04/92	6/04/92	6/05/92	6/05/92	6/05/92	6/05/92
DATE ANALYZED	5/07/92	6/12/92	6/08/92	6/08/92	6/08/92	6/08/92	6/08/92
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
VINYL CHLORIDE	<0.2	3.9	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	3.7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	<0.2	4.7	5.5	0.84	<0.2	<0.2	<0.2
1,1-DICHLOROETHANE	<0.2	11	2.1	<0.2	<0.2	<0.2	<0.2
1,2-DICHLOROETHENE (CIS)	1.4	18	3.3	0.78	<0.2	<0.2	0.69
1,2-DICHLOROETHENE (TRANS)	<0.2	0.28	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROFORM	<0.2	1.0	1.4	0.98	<0.2	<0.2	<0.2
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	0.45	3.1	0.26	<0.2	<0.2	<0.2
1,2-DICHLOROETHANE	<0.2	0.25	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	<0.2	1.2	0.73	<0.2	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<0.2	<0.2	<0.2	0.21	<0.2	<0.2	<0.2
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROETHENE	<0.2	23	33	2.0	<0.2	<0.2	<0.2
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOFORM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROBENZENE-601	120	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DICHLORODIFLUOROMETHANE	<0.2	0.79	0.33	<0.2	<0.2	<0.2	<0.2
TRICHLOROFLUOROMETHANE	<0.2	0.38	<0.2	<0.2	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<0.2	1.3	0.59	2.3	<0.2	<0.2	<0.2
BENZENE-602	16	1.2	<0.5	11	<0.5	<0.5	<0.5
TOLUENE-602	0.65	<0.5	<0.5	8.7	<0.5	<0.5	<0.5
CHLOROBENZENE-602	120	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ETHYLBENZENE-602	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	1.1	1.3	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-DICHLOROBENZENE-602	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	4.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TOTAL XYLENES-602	16	<1.0	<1.0	8.0	<1.0	<1.0	<1.0

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- NJ - Analyte tentatively identified, reported concentration is approximate
- UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
- R - Sample results are rejected due to serious deficiencies in QC
- B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
- D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-8	EW-9	EW-10	EW-12	EW-12	EW-13	EW-14	EW-14	EW-E	EW-NE	EW-NW	EW-W
DATE SAMPLED	6/03/92	6/05/92	6/02/92	6/03/92	6/03/92	6/02/92	6/02/92	6/02/92	6/03/92	6/02/92	6/02/92	6/03/92
DATE ANALYZED	6/05/92	6/09/92	6/03/92	6/04/92	6/04/92	6/03/92	6/04/92	6/04/92	6/05/92	6/04/92	6/04/92	6/03/92
SAMPLE CODE	FO	FO	FO	FO	FD	FO	FO	FD	FO	FO	FO	FO
CHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
VINYL CHLORIDE	0.26	<0.2	<0.2	<0.2	<0.2	<0.2	14	15	370	<0.2	<0.2	5.2
CHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	42	<2.0	<2.0	11
1,1-DICHLOROETHENE	<0.2	<0.2	3.7	<0.2	<0.2	3.4	0.96	1.0	<2.0	<0.2	<0.2	<0.2
1,1-DICHLOROETHANE	<0.2	<0.2	0.73	0.26	0.26	0.33	2.0	2.2	<2.0	<0.2	<0.2	<0.2
1,2-DICHLOROETHENE (CIS)	<0.2	<0.2	0.78	0.60	0.42	0.56	5.9	6.3	290	<0.2	<0.2	0.62
1,2-DICHLOROETHENE (TRANS)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	5.5	<0.2	<0.2	<0.2
CHLOROFORM	<0.2	<0.2	0.91	<0.2	<0.2	1.5	0.22	0.25	<2.0	0.23	<0.2	<0.2
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	<0.2	3.9	<0.2	<0.2	7.3	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.31	<0.2	<2.0	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	0.84	<0.2	0.62	<0.2	<0.2	0.24	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
TRICHLOROETHENE	<0.2	<0.2	14	1.2	1.2	25	2.2	2.2	<2.0	<0.2	<0.2	<0.2
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
BROMOFORM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
CHLOROBENZENE-601	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.2	1.2	25	<0.2	<0.2	2.8
DICHLORODIFLUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.72	0.73	<2.0	<0.2	<0.2	<0.2
TRICHLOROFLUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.61	0.60	<2.0	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<0.2	<0.2	0.45	<0.2	<0.2	0.24	0.35	0.36	<2.0	<0.2	<0.2	<0.2
BENZENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5
TOLUENE-602	0.89	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	0.53
CHLOROBENZENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	1.2	36	<0.5	<0.5	3.0
ETHYLBENZENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.3	3.5	52	<1.0	<1.0	2.0
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0
TOTAL XYLENES-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0

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Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-RW1D	EW-RW1S	BW-P	BW-SD	BW-SES	BW-WD	EW-1	EW-4	EW-5	EW-5	EW-6	EW-7
DATE SAMPLED	5/06/92	5/06/92	6/09/92	6/09/92	6/09/92	6/09/92	6/02/92	6/04/92	6/04/92	6/04/92	6/02/92	6/02/92
DATE ANALYZED	5/07/92	5/07/92	6/10/92	6/10/92	6/10/92	6/10/92	6/05/92	6/08/92	6/09/92	6/08/92	6/04/92	6/04/92
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
BROMOMETHANE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
VINYL CHLORIDE	1,600	1,600	18	10	<0.2	43	<0.2	2.3	36	34	1,300	<0.2
CHLOROETHANE	<20	<20	1.1	<0.2	<0.2	0.34	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
METHYLENE CHLORIDE	450	420	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	150	<2.0
1,1-DICHLOROETHENE	<20	<20	<0.2	1.7	<0.2	0.37	<0.2	<0.2	<0.2	<0.2	<5.0	0.70
1,1-DICHLOROETHANE	<20	<20	1.0	3.9	0.46	1.8	<0.2	<0.2	<0.2	<0.2	<5.0	0.82
1,2-DICHLOROETHENE (CIS)	3,300	3,600	6.0	92	0.97	34	<0.2	0.77	29	25	1,900	7.3
1,2-DICHLOROETHENE (TRANS)	38	26	<0.2	0.74	<0.2	0.63	<0.2	<0.2	0.53	0.56	24	<0.2
CHLOROFORM	210	190	0.22	<0.2	0.28	0.69	<0.2	<0.2	0.53	0.52	<5.0	0.26
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<20	<20	<0.2	1.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	0.63
1,2-DICHLOROETHANE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
1,1,1-TRICHLOROETHANE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
CARBON TETRACHLORIDE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
BROMODICHLOROMETHANE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
1,2-DICHLOROPROPANE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
TRANS-1,3-DICHLOROPROPENE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
TRICHLOROETHENE	<20	<20	0.22	13	0.87	2.0	<0.2	<0.2	2.1	1.6	<5.0	2.4
DIBROMOCHLOROMETHANE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
CIS-1,3-DICHLOROPROPENE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
1,1,2-TRICHLOROETHANE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
BROMOFORM	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
1,1,2,2-TETRACHLOROETHANE	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
CHLOROBENZENE-601	49	170	2.8	1.9	<0.2	5.5	<0.2	<0.2	2.5	2.3	54	<0.2
DICHLORODIFLUOROMETHANE	<20	<20	0.25	2.0	<0.2	0.88	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
TRICHLOROFLUOROMETHANE	<20	<20	0.21	0.92	<0.2	0.74	<0.2	<0.2	<0.2	0.21	9.1	0.37
2-CHLOROETHYL VINYL ETHER	<20	<20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<0.2
TETRACHLOROETHENE	<20	<20	<0.2	2.6	0.21	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	0.27
BENZENE-602	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5
TOLUENE-602	65	61	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5
CHLOROBENZENE-602	100	240	2.9	2.0	<0.5	5.6	<0.5	<0.5	2.5	2.3	62	<0.5
ETHYLBENZENE-602	<50	130	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5
1,2-DICHLOROBENZENE-602	300	380	7.1	4.8	<1.0	13	<1.0	<1.0	3.9	4.0	200	<1.0
1,3-DICHLOROBENZENE-602	<100	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0
1,4-DICHLOROBENZENE-602	<100	<100	1.6	1.1	<1.0	2.0	<1.0	1.1	<1.0	<1.0	<25	<1.0
TOTAL XYLENES-602	<100	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0

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U - Analyte not detected above reported sample quantification limit

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NJ - Analyte tentatively identified, reported concentration is approximate

UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte

R - Sample results are rejected due to serious deficiencies in QC

B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs

D - Compound analyzed at greater dilution than the rest of the run

1/17/94 TW-1		Standard report			
		Page 1			
Port	Compound Name	28	29	30	31
D = Fl					
0	WELL	TW-1	TW-3	TW-4	TW-P
0	DATE	6/05/92	6/05/92	6/05/92	6/05/92
0	SAMPLE CODE	FO	FO	FO	FO
0					
1	Chloromethane	<0.2	<0.2	<0.2	<0.2
2	Bromomethane	<0.2	<0.2	<0.2	<0.2
3	Vinyl chloride	<0.2	<0.2	<0.2	<0.2
4	Chloroethane	<0.2	<0.2	<0.2	<0.2
5	Methylene chloride	<2.0	<2.0	<2.0	<2.0
6	1,1-Dichloroethene	0.84	<0.2	<0.2	<0.2
7	1,1-Dichloroethane	<0.2	<0.2	<0.2	<0.2
9	1,2-Dichloroethene (cis)	0.78	<0.2	<0.2	0.69
9	1,2-Dichloroethene (trans)	<0.2	<0.2	<0.2	<0.2
9	Chloroform	0.98	<0.2	<0.2	<0.2
10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.26	<0.2	<0.2	<0.2
11	1,2-Dichloroethane	<0.2	<0.2	<0.2	<0.2
12	1,1,1-Trichloroethane	<0.2	<0.2	<0.2	<0.2
13	Carbon Tetrachloride	<0.2	<0.2	<0.2	<0.2
14	Bromodichloromethane	0.21	<0.2	<0.2	<0.2
15	1,2-Dichloropropane	<0.2	<0.2	<0.2	<0.2
16	trans-1,3-Dichloropropene	<0.2	<0.2	<0.2	<0.2
17	Trichloroethene	2.0	<0.2	<0.2	<0.2
18	Dibromochloromethane	<0.2	<0.2	<0.2	<0.2
19	cis-1,3-Dichloropropene	<0.2	<0.2	<0.2	<0.2
20	1,1,2-Trichloroethane	<0.2	<0.2	<0.2	<0.2
22	Bromoform	<0.2	<0.2	<0.2	<0.2
23	1,1,2,2-Tetrachloroethane	<0.2	<0.2	<0.2	<0.2
25	Chlorobenzene-601	<0.2	<0.2	<0.2	<0.2
27	Benzene	11	<0.5	<0.5	<0.5
28	Toluene	8.7	<0.5	<0.5	<0.5
28	Chlorobenzene-602	<0.5	<0.5	<0.5	<0.5
30	Ethyl benzene	2.8	<0.5	<0.5	<0.5
31	1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
32	1,4-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
33	1,2-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
35	Dichlorodifluoromethane	<0.2	<0.2	<0.2	<0.2
37	Trichlorofluoromethane	<0.2	<0.2	<0.2	<0.2
41	2-Chloroethyl Vinyl Ether	<0.2	<0.2	<0.2	<0.2
42	Tetrachloroethene	2.3	<0.2	<0.2	<0.2
43	Total xylenes	8.0	<1.0	<1.0	<1.0

3/17/94
EW-14

Standard report

Page 1

Sort -FD = F1	Compound Name	6/4/92 19	6/4/92 20	6/2/92 21	6/4/92 22	6/4/92 23	6/12/92 24	5/17/92 25	6/12/92 26	6/2/92 27
		EW-14 6/02/92 FO	EW-14 6/02/92 FO	EW-E 6/03/92 FO	EW-NE 6/02/92 FO	EW-NW 6/02/92 FO	EW-W 6/03/92 FO	EW-DE 5/03/92 FO	SB-4 6/04/92 FO	SB-6 6/04/92 FO
0	WELL									
0	DATE									
0	SAMPLE CODE									
0										
1	Chloromethane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2	Bromomethane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
3	Vinyl chloride	14	15	370	<0.2	<0.2	5.2	<0.2	3.9	<0.2
4	Chloroethane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
5	Methylene chloride	<2.0	<2.0	42	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2
6	1,1-Dichloroethene	0.96	1.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
7	1,1-Dichloroethane	2.0	2.2	<2.0	<0.2	<0.2	<0.2	<0.2	4.7	5.5
9	1,2-Dichloroethene (cis)	5.9	6.3	290	<0.2	<0.2	0.62	<0.2	11	2.1
9	1,2-Dichloroethene (trans)	<0.2	<0.2	5.5	<0.2	<0.2	<0.2	<0.2	18	3.3
9	Chloroform	0.22	0.25	<2.0	0.23	<0.2	<0.2	<0.2	0.28	<0.2
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	1.0	1.4
11	1,2-Dichloroethane	0.31	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	0.45	3.1
12	1,1,1-Trichloroethane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	0.25	<0.2
13	Carbon Tetrachloride	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	1.2	0.73
14	Bromodichloromethane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
15	1,2-Dichloropropane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
16	trans-1,3-Dichloropropene	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
17	Trichloroethene	2.2	2.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
18	Dibromochloromethane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	23	33
19	cis-1,3-Dichloropropene	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
20	1,1,2-Trichloroethane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
22	Bromoform	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
23	1,1,2,2-Tetrachloroethane	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
25	Chlorobenzene-601	1.2	1.2	25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
27	Benzene	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	2.8	<0.2	<0.2
28	Toluene	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	16	1.2	<0.5
28	Chlorobenzene-602	1.2	1.2	36	<0.5	<0.5	0.53	0.65	<0.5	<0.5
30	Ethyl benzene	<0.5	<0.5	<5.0	<0.5	<0.5	3.0	120	<0.5	<0.5
31	1,3-Dichlorobenzene	<1.0	<1.0	<10	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5
32	1,4-Dichlorobenzene	<1.0	<1.0	<10	<1.0	<1.0	<1.0	1.3	<1.0	<1.0
33	1,2-Dichlorobenzene	3.3	3.5	52	<1.0	<1.0	<1.0	4.6	<1.0	<1.0
35	Dichlorodifluoromethane	0.72	0.73	<2.0	<0.2	<0.2	2.0	1.1	1.3	<1.0
37	Trichlorofluoromethane	0.61	0.60	<2.0	<0.2	<0.2	<0.2	<0.2	0.79	0.33
41	2-Chloroethyl Vinyl Ether	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	<0.2	0.38	<0.2
42	Tetrachloroethene	0.35	0.36	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
43	Total xylenes	<1.0	<1.0	<10	<1.0	<1.0	<1.0	16	<1.0	<1.0

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were rejected "R".

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than the upper acceptance limit as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were not qualified.

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than or equal to 10% but less than the lower acceptance limit discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were qualified as approximated "UJ".

- The SVOC surrogate recovery was less than 10% as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both was qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were rejected "R".

Comments:

Were concentrations of any analyses found in the method blanks? Yes No

If yes, list the detected constituents and their associated concentration.

Comments:

SEE GENERAL COMMENTS, POINT 7. ON FRONT & BACK OF FRONT PAGE

Were constituent concentrations in the database found to match the raw data? Yes No

Identify any discrepancies.

- SVOC SHOULD BE 120 FOR CHLOROBENZENE SHOULD BE 120

Were matrix spike recoveries reviewed and found to meet data control limits? Yes No

If no, check the appropriate boxes.

- The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:

- The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

- The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

- The analytical data were qualified for the following reason:

Comments:

Were surrogate recoveries found to be within acceptable QC limits? Yes No

If no, check the appropriate boxes.

- The VOC surrogate recovery was greater than the upper acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were not qualified.

- The VOC surrogate recovery was greater than or equal to 10% but less than the lower acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were qualified as approximated "UJ".

- The VOC surrogate recovery was less than 10% as discussed for the following samples:

ESTES LANDFILL DATA REVIEW

Project Number: 11322 048
 Data Reviewer: M. CLINE
 Date of Review: 4-4-94
 Sample Matrix: AQUEOUS
 Sampling Round: JUNE '92

x = OK

* = Problem as noted

$\frac{1}{198} \sim 4$

1. ~~x~~ Review chain of custody sheets
2. ~~x~~ Review case narrative
3. Technical holding times met
4. ~~x~~ Spike recoveries
5. ~~x~~ Spike duplicate recoveries
6. ~~x~~ % difference $\frac{MS-MSD}{1/2(MS+MSD)}$
7. ~~x~~ Method blanks
8. ~~x~~ Trip blanks

General comments:

ANALYZED BY VISTA LABORATORIES

1. - FOR SAMPLE EW-RW15 ONLY ONE VOA WAS FREE OF BUBBLES.
 - FOR SAMPLE EW-6, BOTH VOAS HAD BUBBLES
 - FOR SAMPLE EW-12, ONLY ONE VOA ARRIVED SAFELY
2. - IN A LETTER DATED JULY 8, 1992 VISTA DISCOVERS THAT AN INAPPROPRIATE WATER SOURCE FOR FIELD & TRIP BLANKS HAD BEEN SUPPLIED TO HLA. THIS IMPROPER PRESENCE OF TRIHALOMETHANES.
7. - METHOD BLANK (601) FOR 5/7/92 CONTAINED 3.9 MG/L OF METHYLENE CHLORIDE
 - METHOD BLANK (601) FOR 5/11/92 CONTAINED 5.9 MG/L OF METHYLENE CHLORIDE
 - METHOD BLANK (601) FOR 6/4/92 CONTAINED 6.5 MG/L OF METHYLENE CHLORIDE
 - METHOD BLANK (601) FOR 6/08/92 CONTAINED 4.6 MG/L OF METHYLENE CHLORIDE
 - " " " " 6/09/92 " 5.4 MG/L " " "
 - " " " " 6/10/92 " 4.0 MG/L " " "
 - " " " " 6/12/92 " 6.5 MG/L " " "
 - " " " " 6-12-92 " 4.4 MG/L " " "

OUT

7. - METHOD BLANK (601) FOR 6/30/92 CONTAINED 4.9 $\mu\text{g/l}$ OF METHYLENE CHLORIDE
- FIELD BLANK (601) FOR EW-FB1 CONTAINED 6.7 $\mu\text{g/l}$ OF CHLOROFORM AND 0.98 BROMODICHLOROMETHANE.
 - FIELD BLANK (601) FOR EW-FB2 CONTAINED 0.44 $\mu\text{g/l}$ OF DICHLORODIFLUOROMETHANE AND CHLOROFORM = 7.3 $\mu\text{g/l}$ AND 0.92 $\mu\text{g/l}$ OF BROMODICHLOROMETHANE
 - FIELD BLANK (601) FOR EW-FB3 CONTAINED 6.7 $\mu\text{g/l}$ OF CHLOROFORM, 1.1 $\mu\text{g/l}$ BROMODICHLOROMETHANE,

8. - TRIP BLANK EW-TB1:
- 0.40 $\mu\text{g/l}$ DICHLORODIFLUOROMETHANE
 - 7.3 $\mu\text{g/l}$ CHLOROFORM
- TRIP BLANK EW-TB2:
- 0.91 $\mu\text{g/l}$ BROMODICHLOROMETHANE
 - 6.4 $\mu\text{g/l}$ CHLOROFORM
- TRIP BLANK EW-TB3:
- 0.93 $\mu\text{g/l}$ BROMODICHLOROMETHANE
 - 6.6 $\mu\text{g/l}$ CHLOROFORM
 - 0.91 $\mu\text{g/l}$ BROMODICHLOROMETHANE
- TRIP BLANK EW-TB4:
- 7.2 $\mu\text{g/l}$ CHLOROFORM
 - 0.89 $\mu\text{g/l}$ BROMODICHLOROMETHANE
- TRIP BLANK EW-TB5:
- 7.4 $\mu\text{g/l}$ CHLOROFORM
 - 0.93 $\mu\text{g/l}$ BROMODICHLOROMETHANE
- TRIP BLANK EW-TB6:
- 0.56 $\mu\text{g/l}$ DICHLORODIFLUOROMETHANE
 - 7.3 $\mu\text{g/l}$ CHLOROFORM
 - 1.0 $\mu\text{g/l}$ BROMODICHLOROMETHANE

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-RW2	SB-4	SB-6	TW-1	TW-3	TW-4	TW-P
DATE SAMPLED	3/11/92	3/11/92	3/11/92	3/17/92	3/17/92	3/17/92	3/13/92
DATE ANALYZED	3/17/92	3/17/92	3/17/92	3/25/92	3/26/92	3/26/92	3/24/92
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
VINYL CHLORIDE	39	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	<0.2	<0.2	3.7	3.3	<0.2	<0.2	<0.2
1,1-DICHLOROETHANE	<0.2	4.8	1.9	5.2	<0.2	<0.2	<0.2
1,2-DICHLOROETHENE (CIS)	35	12	4.3	15	<0.2	<0.2	1.2
1,2-DICHLOROETHENE (TRANS)	0.38	0.21	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROFORM	<0.2	1.4	1.2	0.89	<0.2	<0.2	1.9
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	<0.2	0.32	<0.2	<0.2	<0.2	<0.2
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	<0.2	1.0	0.49	0.63	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.50
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROETHENE	0.49	25	25	15	<0.2	<0.2	<0.2
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOFORM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROBENZENE-601	3.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DICHLORODIFLUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROFUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<0.2	1.1	<0.2	0.39	<0.2	<0.2	<0.2
BENZENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TOLUENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	0.58	<0.5
CHLOROBENZENE-602	4.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ETHYLBENZENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	7.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TOTAL XYLENES-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

FD = Field Duplicate, FO = Field Original

U - Analyte not detected above reported sample quantification limit

J - Analyte positively identified, reported concentration is approximate

NJ - Analyte tentatively identified, reported concentration is approximate

UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte

R - Sample results are rejected due to serious deficiencies in QC

B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs

D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-14	EW-14	EW-14	EW-E	EW-E	EW-NE	EW-NW	EW-W	EW-W	EW-OE	EW-RW1	EW-RW1
DATE SAMPLED	3/10/92	3/10/92	4/01/92	3/12/92	4/01/92	3/12/92	3/10/92	3/12/92	4/01/92	3/11/92	3/11/92	3/11/92
DATE ANALYZED	3/12/92	3/17/92	4/07/92	3/19/92	4/08/92	3/19/92	3/12/92	3/19/92	4/07/92	3/17/92	3/17/92	3/17/92
SAMPLE CODE	FO	FD	FO	FO	FO	FO	FO	FO	FO	FO	FO	FD
CHLOROMETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
BROMOMETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
VINYL CHLORIDE	14	15	12	210	180	<0.2	<0.2	9.2	8.0	4.8	350	330
CHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<20	27	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<100
1,1-DICHLOROETHENE	<0.2	<0.2	0.90	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
1,1-DICHLOROETHANE	1.2	1.2	1.3	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
1,2-DICHLOROETHENE (CIS)	11	10	7.7	430	320	<0.2	<0.2	1.0	0.73	6.2	2,500	2,600
1,2-DICHLOROETHENE (TRANS)	<0.2	<0.2	<0.2	7.2	2.1	<0.2	<0.2	<0.2	<0.2	0.24	13	14
CHLOROFORM	0.68	0.81	0.30	<2.0	<2.0	<0.2	0.20	<0.2	<0.2	0.40	<2.0	<10
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
1,1,1-TRICHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
BROMODICHLOROMETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
TRICHLOROETHENE	1.2	1.5	2.2	2.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
BROMOFORM	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
CHLOROBENZENE-601	0.45	0.59	0.67	6.4	9.5	<0.2	<0.2	2.3	2.3	25	27	10
DICHLORODIFLUOROMETHANE	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
TRICHLOROFLUOROMETHANE	<0.2	<0.2	0.20	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
TETRACHLOROETHENE	<0.2	<0.2	0.20	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10
BENZENE-602	<0.5	<0.5	<0.5	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	2.4	<5.0	<25
TOLUENE-602	<0.5	<0.5	<0.5	6.7	5.2	2.3	<0.5	0.56	<0.5	<0.5	<5.0	<25
CHLOROBENZENE-602	1.5	1.5	1.3	12	19	<0.5	<0.5	3.6	3.6	29	38	61
ETHYLBENZENE-602	<0.5	<0.5	<0.5	<5.0	7.8	<0.5	<0.5	<0.5	<0.5	<0.5	8.8	<25
1,2-DICHLOROBENZENE-602	4.7	4.6	4.1	21	31	<1.0	<1.0	3.2	3.2	<1.0	120	150
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<50
1,4-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	3.2	<10	<50
TOTAL XYLENES-602	<1.0	<1.0	<1.0	<10	5.2	<1.0	<1.0	<1.0	<1.0	<1.0	17	<50

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Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-4	EW-4	EW-5	EW-6	EW-6	EW-7	EW-8	EW-9	EW-10	EW-10	EW-12	EW-13
DATE SAMPLED	4/01/92	4/01/92	3/17/92	3/10/92	4/01/92	3/10/92	3/13/92	3/16/92	3/10/92	3/10/92	3/12/92	3/10/92
DATE ANALYZED	4/07/92	4/07/92	3/25/92	3/12/92	4/07/92	3/12/92	3/24/92	3/25/92	3/12/92	3/17/92	3/23/92	3/12/92
SAMPLE CODE	FO	FD	FO	FO	FO	FO	FO	FO	FO	FD	FO	FO
CHLOROMETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
VINYL CHLORIDE	1.2	2.5	28	240	430	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<20	70	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	1.9	2.4	0.87
1,1-DICHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	0.69	<0.2
1,2-DICHLOROETHENE (CIS)	1.0	1.1	26	1,400	1,400	2.9	<0.2	<0.2	<0.2	<0.2	1.8	<0.2
1,2-DICHLOROETHENE (TRANS)	<0.2	<0.2	0.24	6.8	5.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROFORM	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	0.46	0.59	0.27
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	1.5	2.2	<0.2
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROETHENE	<0.2	<0.2	0.66	<2.0	<5.0	0.76	<0.2	<0.2	<0.2	13	12	4.8
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOFORM	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROBENZENE-601	<0.2	<0.2	1.3	12	22	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DICHLORODIFLUOROMETHANE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROFUOROMETHANE	<0.2	<0.2	0.61	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BENZENE-602	<0.5	<0.5	<0.5	<5.0	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TOLUENE-602	<0.5	<0.5	<0.5	5.6	<13	0.51	<0.5	<0.5	0.53	<0.5	<0.5	<0.5
CHLOROBENZENE-602	<0.5	<0.5	2.2	25	40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ETHYLBENZENE-602	<0.5	<0.5	<0.5	<5.0	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	1.5	1.6	4.1	71	120	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<10	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<10	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TOTAL XYLENES-602	<1.0	<1.0	<1.0	<10	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

- FD = Field Duplicate, FO = Field Original
 U - Analyte not detected above reported sample quantification limit
 J - Analyte positively identified, reported concentration is approximate
 NJ - Analyte tentatively identified, reported concentration is approximate
 UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
 R - Sample results are rejected due to serious deficiencies in QC
 B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
 D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	BW-P	BW-P	BW-SD	BW-SD	BW-SES	BW-SES	BW-WD	BW-WD	EW-1	EW-2	EW-3	EW-4
DATE SAMPLED	3/13/92	4/02/92	3/13/92	4/02/92	3/13/92	4/02/92	3/13/92	4/02/92	3/12/92	3/12/92	3/12/92	3/17/92
DATE ANALYZED	3/23/92	4/08/92	3/24/92	4/14/92	3/24/92	4/15/92	3/23/92	4/14/92	3/19/92	3/18/92	3/18/92	3/25/92
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
VINYL CHLORIDE	29	22	<0.2	<0.2	<0.2	<0.2	33	27	<0.2	<0.2	<0.2	2.5
CHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.3	<0.2	<0.2	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	2.8	<2.0	2.8	<2.0	2.2	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	<0.2	<0.2	0.42	1.1	<0.2	<0.2	0.32	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-DICHLOROETHANE	1.6	1.2	0.39	1.4	<0.2	<0.2	1.7	0.99	<0.2	<0.2	<0.2	<0.2
1,2-DICHLOROETHENE (CIS)	18	11	21	69	<0.2	<0.2	58	42	<0.2	<0.2	<0.2	<0.2
1,2-DICHLOROETHENE (TRANS)	<0.2	0.22	0.28	0.48	<0.2	<0.2	0.50	0.47	<0.2	<0.2	<0.2	1.1
CHLOROFORM	<0.2	<0.2	1.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	<0.2	0.27	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.41	<0.2	<0.2	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROETHENE	<0.2	<0.2	5.3	13	<0.2	<0.2	4.5	3.3	<0.2	<0.2	<0.2	<0.2
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOFORM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROBENZENE-601	4.3	3.5	<0.2	0.25	<0.2	<0.2	2.7	2.9	<0.2	<0.2	<0.2	<0.2
DICHLORODIFLUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROFUOROMETHANE	0.83	<0.2	<0.2	<0.2	<0.2	<0.2	1.9	0.47	<0.2	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<0.2	<0.2	<0.2	0.72	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BENZENE-602	<0.5	0.54	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TOLUENE-602	<0.5	0.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CHLOROBENZENE-602	5.3	4.4	<0.5	0.53	<0.5	<0.5	3.5	3.8	<0.5	0.57	0.74	<0.5
ETHYLBENZENE-602	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	12	11	<1.0	1.0	<1.0	<1.0	8.7	9.3	<1.0	<1.0	<1.0	1.3
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	1.9	1.8	<1.0	<1.0	<1.0	<1.0	1.1	1.2	<1.0	<1.0	<1.0	<1.0
TOTAL XYLENES-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

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Port	Compound Name	3/17/92	4/8/92	3/17/92	3/12/92	3/19/92	4/7/92	3/17/92	3/17/92	3/17/92	
ID = F1		28	29	30	31	32	33	34	35	36	
		EW-E	EW-E	EW-NE	EW-NW	EW-W	EW-W	EW-OE	EW-RW1	EW-RW1	
		3/12/92	4/01/92	3/12/92	3/10/92	3/12/92	4/01/92	3/11/92	3/11/92	3/11/92	
		FO	FO	FO	FO	FO	FO	FO	FO	FO	
0	WELL	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
0	DATE	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
0	SAMPLE CODE	210	180	<0.2	<0.2	9.2	8.0	4.8	350	330	
0		<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
1	Chloromethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<100	
2	Bromomethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
3	Vinyl chloride	210	180	<0.2	<0.2	9.2	8.0	4.8	350	330	
4	Chloroethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
5	Methylene chloride	<2.0	27	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
6	1,1-Dichloroethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<100	
7	1,1-Dichloroethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
9	1,2-Dichloroethane (cis)	430	320	<0.2	<0.2	1.0	0.73	6.2	2,500	2,600	
9	1,2-Dichloroethane (trans)	7.2	2.1	<0.2	<0.2	<0.2	<0.2	0.24	13	14	
9	Chloroform	<2.0	<2.0	<0.2	0.20	<0.2	<0.2	0.40	<2.0	<10	
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
11	1,2-Dichloroethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
12	1,1,1-Trichloroethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
13	Carbon Tetrachloride	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
14	Bromodichloromethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
15	1,2-Dichloropropane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
16	trans-1,3-Dichloropropene	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
17	Trichloroethene	2.2	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
18	Dibromochloromethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
19	cis-1,3-Dichloropropene	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
20	1,1,2-Trichloroethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
22	Bromoform	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
23	1,1,2,2-Tetrachloroethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
25	Chlorobenzene-601	6.4	9.5	<0.2	<0.2	2.3	2.3	25	27	10	
27	Benzene	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	2.4	<5.0	<25	
28	Toluene	6.7	5.2	2.3	<0.5	0.56	<0.5	<0.5	<5.0	<25	
28	Chlorobenzene-602	12	19	<0.5	<0.5	3.6	3.6	29	38	61	
30	Ethyl benzene	<5.0	7.8	<0.5	<0.5	<0.5	<0.5	<0.5	8.8	<25	
31	1,3-Dichlorobenzene	<10	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<50	
32	1,4-Dichlorobenzene	<10	<10	<1.0	<1.0	<1.0	<1.0	3.2	<10	<50	
33	1,2-Dichlorobenzene	21	31	<1.0	<1.0	3.2	3.2	<1.0	120	150	
35	Dichlorodifluoromethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
37	Trichlorofluoromethane	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
41	2-Chloroethyl Vinyl Ether	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
42	Tetrachloroethene	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	
43	Total xylenes	<10	5.2	<1.0	<1.0	<1.0	<1.0	<1.0	17	<50	

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EW-2		3/18/92	3/18/92	3/25/92	4/7/92	4/7/92	3/25/92	3/12/92	4/7/92	3/12/92	
Port	Compound Name	10	11	12	13	14	15	16	17	18	
0	DATE	EW-2	EW-3	EW-4	EW-4	EW-4	EW-5	EW-6	EW-6	EW-7	
0	SAMPLE CODE	3/12/92	3/12/92	3/17/92	4/01/92	4/01/92	3/17/92	3/10/92	4/01/92	3/10/92	
0		FO	FO	FO	FO	FO	FO	FO	FO	FO	
0	WELL										
0	DATE										
0	SAMPLE CODE										
0											
1	Chloromethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
2	Bromomethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
3	Vinyl chloride	<0.2	<0.2	2.5	1.2	2.5	28	240	430	<0.2	
4	Chloroethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
5	Methylene chloride	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	70	<2.0	
6	1,1-Dichloroethene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
7	1,1-Dichloroethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
9	1,2-Dichloroethene (cis)	<0.2	<0.2	1.1	1.0	1.1	26	1,400	1,400	2.9	
9	1,2-Dichloroethene (trans)	<0.2	<0.2	<0.2	<0.2	<0.2	0.24	6.8	5.6	<0.2	
9	Chloroform	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
11	1,2-Dichloroethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
12	1,1,1-Trichloroethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
13	Carbon Tetrachloride	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
14	Bromodichloromethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
15	1,2-Dichloropropane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
16	trans-1,3-Dichloropropene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
17	Trichloroethene	<0.2	<0.2	<0.2	<0.2	<0.2	0.66	<2.0	<5.0	0.76	
18	Dibromochloromethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
19	cis-1,3-Dichloropropene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
20	1,1,2-Trichloroethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
22	Bromoform	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
23	1,1,2,2-Tetrachloroethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
25	Chlorobenzene-601	<0.2	<0.2	<0.2	<0.2	<0.2	1.3	12	22	<0.2	
27	Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<13	<0.5	
28	Toluene	0.57	0.74	<0.5	<0.5	<0.5	<0.5	5.6	<13	0.51	
28	Chlorobenzene-602	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	25	40	<0.5	
30	Ethyl benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<13	<0.5	
31	1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<25	<1.0	
32	1,4-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<25	<1.0	
33	1,2-Dichlorobenzene	<1.0	<1.0	1.3	1.5	1.6	4.1	71	120	<1.0	
35	Dichlorodifluoromethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
37	Trichlorofluoromethane	<0.2	<0.2	<0.2	<0.2	<0.2	0.61	<2.0	<5.0	<0.2	
41	2-Chloroethyl Vinyl Ether	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
42	Tetrachloroethene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<5.0	<0.2	
43	Total xylenes	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<25	<1.0	

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were rejected "R".

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than the upper acceptance limit as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were not qualified.

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than or equal to 10% but less than the lower acceptance limit discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were qualified as approximated "UJ".

- The SVOC surrogate recovery was less than 10% as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both was qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were rejected "R".

Comments:

Were concentrations of any analyses found in the method blanks? Yes No

If yes, list the detected constituents and their associated concentration.

Comments:

METHOD BLANK (601) ON 3/21/92 CONTAINED 4.0 MG/L OF METHYLENE CHLORIDE

Were constituent concentrations in the database found to match the raw data? Yes No

Identify any discrepancies.

Were matrix spike recoveries reviewed and found to meet data control limits? Yes No

If no, check the appropriate boxes.

- The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:

- The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

- The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

- The analytical data were qualified for the following reason:

Comments:

Were surrogate recoveries found to be within acceptable QC limits? Yes No

If no, check the appropriate boxes.

- The VOC surrogate recovery was greater than the upper acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were not qualified.

- The VOC surrogate recovery was greater than or equal to 10% but less than the lower acceptance limit as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were qualified as approximated "UJ".

- The VOC surrogate recovery was less than 10% as discussed for the following samples:

ESTES LANDFILL DATA REVIEW

Project Number: 11322 048
Data Reviewer: M. CLINE
Date of Review: 4-4-94
Sample Matrix: AQUEOUS
Sampling Round: MARCA '92

x = OK

* = Problem as noted

1. Review chain of custody sheets
2. Review case narrative
3. Technical holding times met
4. Spike recoveries
5. Spike duplicate recoveries
6. % difference $\frac{MS-MSD}{1/2(MS+MSD)}$
7. Method blanks
8. Trip blanks

General comments: ANALYZED BY VISTA LABORATORIES

7. - METROW BLANK (601) ON 3/24/92 CONTAINED 4.0 $\mu\text{g/l}$ OF METHYLENE CHLORIDE
 - FIELD BLANK (60) FOR EW-FB1 CONTAINED 4.7 $\mu\text{g/l}$ OF METHYLENE CHLORIDE
 - FIELD BLANK (60) FOR EW-FB2 CONTAINED 5.0 $\mu\text{g/l}$ OF METHYLENE CHLORIDE
 - FIELD BLANK (60) FOR EW-FB3 CONTAINED 6.7 $\mu\text{g/l}$ OF METHYLENE CHLORIDE
8. - TRIP BLANK (60) FOR EW-TB5 CONTAINED 2.2 $\mu\text{g/l}$ OF METHYLENE CHLORIDE
 - TRIP BLANK (60) FOR EW-TB6 CONTAINED 3.9 $\mu\text{g/l}$ OF METHYLENE CHLORIDE

Table 1
Results of 601/602 Analyses in µg/L

WELL	SB-4	SB-6	TW-1	TW-3	TW-4	TW-P
DATE SAMPLED	12/11/91	12/11/91	12/12/91	12/12/91	12/12/91	12/12/91
DATE ANALYZED	12/16/91	12/16/91	12/17/91	12/14/91	12/17/91	12/14/91
SAMPLE CODE	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
VINYL CHLORIDE	<0.2	<0.2	<0.2	16	<0.2	6.2
CHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-DICHLOROETHENE	5.5	15	4.3	0.62	<0.2	1.4
1,1-DICHLOROETHANE	1.6	1.4	0.83	2.7	<0.2	2.6
1,2-DICHLOROETHENE (CIS/TRANS)	.	.	.	.	.	.
1,2-DICHLOROETHENE (CIS)	1.1	1.2	0.46	11	<0.2	13
1,2-DICHLOROETHENE (TRANS)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROFORM	1.1	1.7	0.81	<0.2	6.5	0.89
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3.2	13	4.6	<0.2	<0.2	<0.2
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	2.0	3.9	1.1	<0.2	<0.2	<0.2
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	0.86	2.5	<0.2	<0.2	0.33	<0.2
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROETHENE	27	93	18	2.1	<0.2	6.0
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
EDB (1,2-DIBROMOETHANE)	.	.	.	.	.	.
BROMOFORM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
CHLOROBENZENE-601	<0.2	<0.2	<0.2	1.7	<0.2	0.99
DICHLORODIFLUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRICHLOROFLUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TETRACHLOROETHENE	0.50	0.66	0.35	0.34	<0.2	1.2
BENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TOLUENE	<0.5	<0.5	0.91	2.3	0.76	<0.5
CHLOROBENZENE-602	<0.5	<0.5	<0.5	2.5	<0.5	1.4
ETHYL BENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	6.0	<1.0	3.2
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TOTAL XYLENES	.	.	.	.	.	.

FD = Field Duplicate, FO = Field Original

U - Analyte not detected above reported sample quantification limit

J - Analyte positively identified, reported concentration is approximate

NJ - Analyte tentatively identified, reported concentration is approximate

UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte

R - Sample results are rejected due to serious deficiencies in QC

B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs

D - Compound analyzed at greater dilution than the rest of the run

3/24/94

TW-3

Standard report

Page 1

Sort	Compound Name	12/19/93	12/19/93
-FD = F		37	38
0	WELL		
0	DATE	TW-3	TW-4
0	SAMPLE CODE	12/07/93	12/07/93
0		FO	FO
1	Chloromethane	<2.0	<2.0
2	Bromomethane	<2.0	<2.0
3	Vinyl chloride	<2.0	<2.0
4	Chloroethane	2.8	<1.0
5	Methylene chloride	<2.0	<2.0
6	1,1-Dichloroethene	2.3	<2.0
7	1,1-Dichloroethane	<1.0	<1.0
9	1,2-Dichloroethene (cis)	<1.0	<1.0
9	1,2-Dichloroethene (trans)	1.5	<1.0
9	Chloroform	<1.0	<1.0
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0	<1.0
11	1,2-Dichloroethane	2.3	<1.0
12	1,1,1-Trichloroethane	<1.0	<1.0
13	Carbon Tetrachloride	<1.0	<1.0
14	Bromodichloromethane	<1.0	<1.0
15	1,2-Dichloropropane	<1.0	<1.0
16	trans-1,3-Dichloropropene	<1.0	<1.0
17	Trichloroethene	<1.0	<1.0
18	Dibromochloromethane	<1.0	<1.0
19	cis-1,3-Dichloropropene	<2.0	<2.0
20	1,1,2-Trichloroethane	<2.0	<2.0
22	Bromoform	<1.0	<1.0
23	1,1,2,2-Tetrachloroethane	<1.0	<1.0
25	Chlorobenzene-601	<1.0	<1.0
27	Benzene	<1.0	<1.0
28	Toluene	<1.0	<1.0
28	Chlorobenzene-602	<1.0	<1.0
30	Ethyl benzene	<1.0	<1.0
31	1,3-Dichlorobenzene	<1.0	<1.0
32	1,4-Dichlorobenzene	<2.0	<2.0
33	1,2-Dichlorobenzene	<2.0	<2.0
35	Dichlorodifluoromethane	<2.0	<2.0
37	Trichlorofluoromethane	<2.0	<2.0
41	2-Chloroethyl Vinyl Ether	<2.0	<2.0
42	Tetrachloroethene	<2.0	<2.0
43	Total xylenes	<1.0	<1.0
		<2.0	<2.0

TW-4

FP

This file is labeled "soilwb5.wpd" and contains approximately 25 pages. This file contains the rule text, Appendix A "Soil Remediation Levels" (SRLs), and Appendices B and C "VEMUR" forms. This is an unofficial version of the rule text, it is streamlined and only contains Article 2. Please be advised that the official version of the rule is supplied by the Secretary of State and formatting will differ from this version.

**TITLE 18. ENVIRONMENTAL QUALITY
CHAPTER 7. DEPARTMENT OF ENVIRONMENTAL QUALITY
REMEDIAL ACTION**

ARTICLE 2. SOIL REMEDIATION STANDARDS

Section	
R18-7-201.	Definitions
R18-7-202.	Applicability
R18-7-203.	Remediation Standards
R18-7-204.	Background Remediation Standards
R18-7-205.	Pre-Determined Remediation Standards
R18-7-206.	Site-Specific Remediation Standards
R18-7-207.	Voluntary Environmental Mitigation Use Restriction (VEMUR)
R18-7-208.	Letter of Completion
R18-7-209.	Notice of Remediation and Repository
Appendix A	Soil Remediation Levels (SRLs)
Appendix B	Notice of Voluntary Environmental Mitigation Use Restriction
Appendix C	Cancellation of Voluntary Environmental Mitigation Use Restriction

ARTICLE 2. SOIL REMEDIATION STANDARDS

R18-7-201. Definitions

In addition to the definitions provided in A.R.S. §§ 49-151 and 49-152, the following definitions apply in this Article:

1. "Aquifer Protection Program" means the system of requirements prescribed in A.R.S. Title 49, Chapter 2, Article 3 and A.A.C. Title 18, Chapter 9, Article 1.
2. "Background" means a concentration of a naturally occurring contaminant in soils.
3. "Cancer Group" means a category of chemicals listed by a weight-of-evidence assessment by the United States Environmental Protection Agency to evaluate human carcinogenicity. Based on this evaluation, chemicals are placed in one of the following categories: A - known human carcinogen; B1 or B2 - probable human carcinogen; C - possible human carcinogen; D - not classified as to human carcinogenicity; and E - evidence of non-carcinogenicity in humans.
4. "Carcinogen" or "carcinogenic" means a contaminant which has a cancer group designation of Class A, B1, B2, or C, but does not include a substance having cancer group designations D or E. The cancer group designation is found in Appendix A to the rule.
5. "Contact" means exposure to a contaminant through ingestion, inhalation, or dermal absorption.
6. "Contaminant" means a substance regulated by the programs listed in R18-7-202(A) or R18-7-202(B).

7. "Department" means the Arizona Department of Environmental Quality.
8. "Deterministic Risk Assessment Methodology" means a site-specific human health risk assessment, performed using a specific set of input variables, exposure assumptions, and toxicity criteria, represented by point estimates for each receptor evaluated, which results in a point estimate of risk.
9. "Ecological Community" means an assemblage of populations of different species within a specified location in space and time.
10. "Ecological Receptor" means a specific ecological community, population, or individual organism, protected by federal or state laws and regulations, or a local population which provides an important natural or economic resource, function, and value.
11. "Ecological Risk Assessment" is a scientific evaluation of the probability of an adverse effect to ecological receptors from exposure to specific types and concentrations of contaminants. An ecological risk assessment contains four components: identification of potential contaminants; an exposure assessment; a toxicity assessment; and a risk characterization.
12. "Engineering Control" means a remediation method used to prevent or minimize exposure to contaminants, and includes technologies that reduce the mobility or migration of contaminants.
13. "Excess Lifetime Cancer Risk" means the increased risk of developing cancer above the background cancer occurrence levels due to exposure to contaminants.
14. "Exposure" means contact between contaminants and organisms.
15. "Exposure Pathway" means the course a contaminant takes from a source to an exposed organism. Each exposure pathway includes a source or release from a source, an exposure point, and an exposure route. If the exposure point differs from the source, transport/exposure media (i.e., air, water) are also included.
16. "Exposure Point" means a location of potential contact between a contaminant and an organism.
17. "Exposure Route" means the way a contaminant comes into contact with an organism (i.e., by ingestion, inhalation, or dermal contact).
18. "Greenfields Pilot Program" means the system of requirements prescribed in Laws 1997, Chapter 296, § 11.
19. "Groundwater" means water in an aquifer as defined in A.R.S. § 49-201(2).
20. "Hazard Index" means the sum of hazard quotients for multiple substances and/or multiple exposure pathways, or the sum of hazard quotients for chemicals acting by a similar mechanism and/or having the same target organ.
21. "Hazardous Waste Management Program" means the system of requirements prescribed in A.R.S. Title 49, Chapter 5, Article 2 and A.A.C. Title 18, Chapter 8, Article 2.
22. "Hazard Quotient" means the value which quantifies non-carcinogenic risk for one chemical for one receptor population for one exposure pathway over a specified exposure period. The hazard quotient is equal to the ratio of a chemical-specific intake to the reference dose.
23. "Imminent and substantial endangerment to the public health or the environment" has the meaning found in A.R.S. § 49-282.02(C)(1).

24. "Institutional control" means a legal or administrative tool or action taken to reduce the potential for exposure to contaminants.
25. "Letter of Completion" means a Departmental statement which indicates whether the property in question has met the soil remediation standards set forth in this Article.
26. "Migrate" or "Migration" means the movement of contaminants from the point of release, emission, discharge, or spillage: through the soil profile; by volatilization from soil to air and subsequent dispersion to air; and by water, wind or other mechanisms.
27. "Non-Residential Site-Specific Remediation Level" means a level of contaminants remaining in soil after remediation which results in a cumulative excess lifetime cancer risk between 1×10^{-6} and 1×10^{-4} and a Hazard Index no greater than 1 based on non-residential exposure assumptions.
28. "Nuisance" means the activities or conditions which may be subject to A.R.S. §§ 49-141 and 49-104(A)(11).
29. "Person" means any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, this state or any of its agencies, departments, political subdivisions, counties, towns, municipal corporations, as well as a natural person.
30. "Population" means an aggregate of individuals of a species within a specified location in space and time.
31. "Probabilistic Risk Assessment Methodology" means a site-specific human health risk assessment, performed using probability distributions of input variables and exposure assumptions which take into account the variability and uncertainty of these values, which results in a range or distribution of possible risk estimates.
32. "Reasonable Maximum Exposure" or "RME" means the highest human exposure case that is greater than the average, but is still within the range of possible exposures to humans at a site.
33. "Remediate" or "remediation" has the meaning found in A.R.S. § 49-151(2).
34. "Repository" means the Department's database, established under A.R.S. § 49-152(D), from which the public may view information pertaining to remediation projects for which a Notice of Remediation has been submitted or a Letter of Completion has been issued.
35. "Residential Site-Specific Remediation Level" means a level of contaminants remaining in the soil after remediation which results in a cumulative excess lifetime cancer risk between 1×10^{-6} and 1×10^{-4} and a Hazard Index no greater than 1 based on residential exposure assumptions.
36. "Residential Use" has the meaning found in A.R.S. § 49-151(3).
37. "Site-Specific Human Health Risk Assessment" is a scientific evaluation of the probability of an adverse effect to human health from exposure to specific types and concentrations of contaminants. A site-specific human health risk assessment contains four components: identification of potential contaminants; an exposure assessment; a toxicity assessment; and a risk characterization.
38. "Soil" means all earthen materials located between the land surface and groundwater including sediments and unconsolidated accumulations produced by the physical and chemical disintegration of rocks.

39. "Soil Remediation Level" or "SRL" means a pre-determined risk-based standard developed by the Arizona Department of Health Services pursuant to A.R.S. § 49-152(A)(1)(a) and listed in Appendix A.
40. "Solid Waste Management program" means the system of requirements prescribed in A.R.S. Title 49, Chapter 4, Article 4 and the rules adopted under those statutes.
41. "Special Waste Management program" means the system of requirements prescribed in A.R.S. Title 49, Chapter 4, Article 9 and A.A.C. Title 18, Chapter 8, Article 3.
42. "Underground Storage Tank program" or "UST program" means the system of requirements prescribed in A.R.S. Title 49, Chapter 6, Article 1 and A.A.C. Title 18, Chapter 12.
43. "Voluntary Environmental Mitigation Use Restriction" or "VEMUR" means, pursuant to A.R.S. § 49-152(B), a written document, signed by the real property owner and the Department, and recorded with the county recorder on the chain of title for a particular parcel of real property, which indicates that a remediation to a level less protective than residential standards has been completed and, unless subsequently canceled, that the owner agrees to restrict the property to non-residential uses.
44. "Voluntary Remediation Program" means the system of requirements prescribed in A.R.S. § 49-104(A)(17).
45. "Water Quality Assurance Revolving Fund" or "WQARF" means the system of requirements prescribed in A.R.S. Title 49, Chapter 2, Article 5 and A.A.C. Title 18, Chapter 7, Article 1.
46. "WQARF Voluntary Program" means the system of requirements prescribed in A.R.S. §§ 49-282.05 and 49-285(B).

R18-7-202. Applicability

- A. This Article applies to a person legally required to conduct soil remediation by any of the following regulatory programs administered by the Department:
 1. The Aquifer Protection Permit Program.
 2. The Hazardous Waste Management Program.
 3. The Solid Waste Management Program.
 4. The Special Waste Management Program.
 5. The Underground Storage Tank Program.
 6. The Water Quality Assurance Revolving Fund.
 7. Any other program under Title 49 that regulates soil remediation.
- B. This Article also applies to a person who is not legally required to conduct soil remediation, but who chooses to do so under any of the following programs administered by the Department:
 1. The Greenfields Pilot Program.
 2. The Voluntary Remediation Program.

3. The WQARF Voluntary Program.

- C. The requirements of this Article apply in addition to any specific requirements of the programs described in subsections (A) or (B).
- D. This Article is limited to soil remediation.
- E. A person who is remediating soil at a site which is characterized before the effective date of this Article shall comply with either the Soil Remediation Standards adopted as an interim rule on March 29, 1996 or the Soil Remediation Standards adopted in this Article. A site is considered characterized when the laboratory analytical results of the soil samples delineating the nature, degree, and extent of soil contamination have been received by the person conducting the remediation.
- F. Nothing in this Article limits the Department's authority to establish more stringent soil remediation levels in response to:
 - 1. A nuisance.
 - 2. An imminent and substantial endangerment to the public health or the environment.
- G. This Article does not apply to persons remediating soil to numeric soil remediation levels specified in orders of the Director or orders of any Court that have been entered before the effective date of this Article.

R18-7-203. Remediation Standards

- A. A person subject to this Article shall remediate soil so that any concentration of contaminants remaining in the soil after remediation is less than or equal to 1 of the following:
 - 1. The background remediation standards prescribed in R18-7-204.
 - 2. The pre-determined remediation standards prescribed in R18-7-205.
 - 3. The site-specific remediation standards prescribed in R18-7-206.
- B. A person who conducts a soil remediation based on the standards set forth in R18-7-205 or R18-7-206 shall remediate soil so that any concentration of contaminants remaining in the soil after remediation does not:
 - 1. Cause or threaten to cause a violation of Water Quality Standards prescribed in A.A.C. Title 18, Chapter 11. If the remediation level for a contaminant in the soil is not protective of aquifer water quality and surface water quality, the person shall remediate soil to an alternative soil remediation level that is protective of aquifer water quality and surface water quality.
 - 2. Exhibit a hazardous waste characteristic of ignitability, corrosivity or reactivity as defined in A.A.C. R18-8-261(A). If the remediation level for a contaminant in the soil results in leaving soils that exhibit a hazardous waste characteristic other than toxicity, the person shall remediate soil to an alternative soil remediation level such that the soil does not exhibit a hazardous waste characteristic other than toxicity.
 - 3. Cause or threaten to cause an adverse impact to ecological receptors. If the Department determines that the remediation level for a contaminant in soil may impact ecological receptors based on the existence of ecological receptors and complete exposure pathways, the person shall

conduct an ecological risk assessment. If the ecological risk assessment indicates that any concentration of contaminants remaining in the soil after remediation causes or threatens to cause an adverse impact to ecological receptors, the person shall remediate soil to an alternative soil remediation level, derived from the ecological risk assessment, that is protective of ecological receptors.

R18-7-204. Background Remediation Standards

- A. A person may elect to remediate to a background concentration for a contaminant.
- B. A person who conducts a remediation to a background concentration for a contaminant shall establish the background concentration using all of the following factors:
 - 1. Site-specific historical information concerning land use.
 - 2. Site-specific sampling of soils unaffected by a release, but having characteristics similar to those of the soils affected by the release.
 - 3. A statistical analysis of the background concentrations using the 95th percentile upper confidence limit.

R18-7-205. Pre-Determined Remediation Standards

- A. A person may elect to remediate to the residential or non-residential Soil Remediation Levels (SRLs) set forth in Appendix A.
- B. A person who conducts an SRL-based remediation shall remediate to the residential SRL on any property where there is residential use at the time remediation is completed.
- C. A pre-determined contaminant standard established by federal law or regulation may be used for polychlorinated biphenyl cleanups regulated pursuant to the Toxic Substances Control Act (TSCA) at 40 C.F.R. § 761.120 et. seq., however, the Department has no regulatory authority to issue a Letter of Completion in TSCA-regulated cleanups.

R18-7-206. Site-Specific Remediation Standards

- A. A person may elect to remediate to a residential or a non-residential site-specific remediation level derived from a site-specific human health risk assessment.
- B. A person who conducts a remediation to a residential or a non-residential site-specific remediation level shall use one of the following site-specific human health risk assessment methodologies:
 - 1. A deterministic methodology. If a deterministic methodology is used, reasonable maximum exposures shall be evaluated for future use scenarios.
 - 2. A probabilistic methodology. If a probabilistic methodology is used, it shall be no less protective than the 95th percentile upper bound estimate of the distribution.
 - 3. An alternative methodology commonly accepted in the scientific community. An alternative methodology is considered accepted in the scientific community if it is published in peer-reviewed literature, such as a professional journal or publication of standards of general circulation, and there is general consensus within the scientific community about the methodology.

- C. A person who conducts a remediation to a site-specific remediation level shall remediate to the residential site-specific remediation level on any property where there is residential use at the time remediation is completed.
- D. With prior approval of the Department, a person may achieve the site-specific remediation levels based on the use of institutional and engineering controls. The approval shall be based, in part, on the demonstration that the institutional and engineering controls will be maintained.
- E. A person conducting a remediation to a residential or a non-residential site-specific remediation level shall remediate the contaminants in soil to a cumulative excess lifetime cancer risk between 1×10^{-6} and 1×10^{-4} and a Hazard Index no greater than one taking into account the factors enumerated in this subsection. The person conducting a remediation, and the Department prior to issuing a Letter of Completion, shall select the excess lifetime cancer risk between 1×10^{-6} and 1×10^{-4} based upon the following site-specific factors:
 1. The presence of multiple contaminants.
 2. The existence of multiple pathways of exposure.
 3. The uncertainty of exposure.
 4. The sensitivity of the exposed population.
 5. Other program-related laws and regulations that may apply.

R18-7-207. Voluntary Environmental Mitigation Use Restriction (VEMUR)

- A. A person who remediates to the non-residential SRL, or to the non-residential site-specific remediation level shall submit the information listed in R18-7-208(A)(1) through (5) and a VEMUR signed by the real property owner, as set forth in Appendix B, to the applicable Departmental program listed in R18-7-202(A) or R18-7-202(B). The VEMUR shall be formatted in accordance with A.R.S. § 11-480 and any other specific requirements of the County Recorder of the jurisdiction.
- B. The applicable Departmental program listed in R18-7-202(A) or R18-7-202(B) shall evaluate the complete information described in R18-7-207(A) and verify whether the non-residential SRL or the non-residential site-specific remediation level has been achieved. An authorized Departmental representative shall either sign the VEMUR submitted pursuant to subsection (A) of this Section and return the signed VEMUR by certified mail, or request additional information to make the verification.
- C. A person described in R18-7-207(A) shall record a VEMUR described in R18-7-207(B) with the County Recorder's office where the property is located within 30 calendar days of receipt of the VEMUR signed by the authorized Departmental representative, as evidenced by the return receipt.
- D. A real property owner who remediates to the background concentration of a contaminant, to the residential SRL, or to the residential site-specific remediation level and who wishes to cancel a recorded VEMUR shall submit the information required in R18-7-208(A)(1) through (5) and a signed VEMUR Cancellation, as set forth in Appendix C, to the applicable Departmental program listed in R18-7-202(A) or R18-7-202(B). The VEMUR Cancellation shall be formatted in accordance with A.R.S. § 11-480 and any other specific requirements of the County Recorder of the jurisdiction.
- E. The applicable Departmental program listed in R18-7-202(A) or R18-7-202(B) shall evaluate the complete information described in R18-7-207(D) and verify whether the background concentration, the residential SRL, or the residential site-specific remediation level has been achieved. An authorized Departmental

representative shall either sign the VEMUR Cancellation submitted pursuant to R18-7-207(D) and return the VEMUR Cancellation via certified mail, or request additional information to make the verification.

- F. A person who records a document described in R18-7-207 shall provide a copy of the recorded document to the applicable Departmental program described in R18-7-202(A) or R18-7-202(B) within 30 calendar days of the date of recording.

R18-7-208. Letter of Completion

- A. If a person requests a Letter of Completion, a person shall submit, at a minimum, the following information to the applicable Departmental program listed in R18-7-202(A) or R18-7-202(B):

1. A description of the actual activities, techniques, and technologies used to remediate soil at the site, including the legal mechanism in place to ensure that any institutional and engineering controls are maintained.
2. Documentation that requirements prescribed in R18-7-203(A) and R18-7-203(B)(1) and (2) have been satisfied.
3. If the Department determines pursuant to R18-7-203(B)(3) that an ecological risk assessment is required, documentation that the requirements prescribed in R18-7-203(B)(3) have been satisfied.
4. Soil sampling analytical results which are representative of the area which has been remediated, including documentation that the laboratory analysis of samples has been performed by a laboratory licensed by the Arizona Department of Health Services under A.R.S. § 36-495 et. seq. and A.A.C. Title 9, Chapter 14, Article 6.
5. A statement signed by the person conducting the remediation certifying the following:

I certify under penalty of law that this document and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

- B. The applicable Departmental program described in R18-7-202(A) or R18-7-202(B) shall evaluate the information described in R18-7-208(A) and R18-7-207(F) to verify compliance with the soil remediation standards set forth under this Article and shall issue a Letter of Completion or request additional information.
- C. The applicable Departmental program listed in R18-7-202(A) or R18-7-202(B) may revoke or amend any Letter of Completion if any of the information submitted pursuant to R18-7-208(A) and R18-7-207(F) is inaccurate or if any condition was unknown to the Department when the Department issued the Letter of Completion.

R18-7-209. Notice of Remediation and Repository

- A. A person conducting soil remediation shall submit a Notice of Remediation to the applicable Departmental program listed in R18-7-202(A) or R18-7-202(B) prior to beginning remediation. A person conducting a soil remediation during an emergency who has notified the Department in accordance with emergency notification requirements prescribed in A.R.S. § 49-284 is not required to submit a Notice of Remediation. Any person who continues or initiates a soil remediation after the initial emergency response shall submit a Notice of Remediation. A Notice of Remediation shall include all of the following information:

1. The name and address of the real property owner.
2. The name and address of the remediating party.
3. A legal description and street address of the property.
4. A list of each contaminant to be remediated.
5. The background concentration, SRL, or site-specific remediation level selected to meet the remediation standards.
6. A description of the current and post-remediation property use as either residential or non-residential.
7. The rationale for the selection of residential or non-residential remediation.
8. The proposed technologies for remediating the site.

B. The Department shall establish and maintain a repository for information regarding sites where soil is remediated. The Repository shall include a listing of sites for which a Notice of Remediation has been submitted or a Letter of Completion has been issued.

1. For sites where a Notice of Remediation has been filed, the Repository shall contain the date the notice was filed and the information submitted as described in R18-7-209(A).
2. For sites where a Letter of Completion has been issued, the Repository shall contain the following:
 - a. The name and address of the real property owner.
 - b. The name and address of the remediating party.
 - c. A legal description and street address of the property.
 - d. A listing of each contaminant that was remediated.
 - e. The background concentration, SRL, or site-specific remediation level selected to meet the remediation standard.
 - f. A description whether the residential or non-residential standard was achieved.
 - g. A description of any engineering or institutional control used to remediate the site.
 - h. The date when the Letter of Completion was issued.
3. The Repository will be available for public review during the Department's normal business hours. A person who wishes to obtain copies of the Repository shall pay a copying fee established by the Department.

APPENDIX A

SOIL REMEDIATION LEVELS (SRLs)

CHEMICAL NAME	CAS NUMBER	CANCER GROUP	RESIDENTIAL	NON
			(mg/kg)	RESIDE NTIAL (mg/kg)
A				
1 Acenaphthene	83-32-9	D	3900.0	41000.0
2 Acephate	30560-19-1	C	260.0	2200.0
3 Acetaldehyde	75-07-0	B2	39.0	150.0
4 Acetochlor	34256-82-1	D	1300.0	14000.0
5 Acetone	67-64-1	D	2100.0	8800.0
6 Acetone cyanohydrin	75-86-5	D	52.0	550.0
7 Acetonitrile	75-05-8	D	220.0	1200.0
8 Acetophenone	98-86-2	D	0.49	1.6
9 Acifluorfen	62476-59-9	D	850.0	8900.0
10 Acrolein	107-02-8	C	0.10	0.34
11 Acrylamide	79-06-1	B2	0.98	4.2
12 Acrylic acid	79-10-7	D	31000.0	290000.0
13 Acrylonitrile	107-13-1	B1	1.9	4.7
14 Alachlor	15972-60-8	B2	55.0	240.0
15 Alar	1596-84-5	D	9800.0	100000.0
16 Aldicarb	116-06-3	D	65.0	680.0
17 Aldicarb sulfone	1646-88-4	D	65.0	680.0
18 Aldrin	309-00-2	B2	0.26	1.1
19 Allyl	5585-64-8	D	16000.0	170000.0
20 Allyl alcohol	107-18-6	D	330.0	3400.0
21 Allyl chloride	107-05-1	C	3200.0	33000.0
22 Aluminum	7429-90-5	D	77000.0	1000000.0
23 Aluminum phosphide	20859-73-8	D	31.0	680.0
24 Amdro	67485-29-4	D	20.0	200.0
25 Ametryn	834-12-8	D	590.0	6100.0
26 m-Aminophenol	591-27-5	D	4600.0	48000.0
27 4-Aminopyridine	504-24-5	D	1.3	14.0
28 Amitraz	33089-61-1	D	160.0	1700.0
29 Ammonia	7664-41-7	D	2200.0	58000.0
30 Ammonium sulfamate	7773-06-0	D	13000.0	140000.0
31 Aniline	62-53-3	B2	19.0	200.0
32 Anthracene	120-12-7	D	20000.0	200000.0
33 Antimony and compounds	7440-36-0	D	31.0	680.0
34 Antimony pentoxide	1314-60-9	D	38.0	850.0
35 Antimony potassium tartrate	28300-74-5	D	69.0	1500.0
36 Antimony tetroxide	1352-81-6	D	31.0	680.0
37 Antimony trioxide	1309-64-4	D	31.0	680.0
38 Apollo	74115-24-5	C	850.0	8900.0
39 Aramite	140-57-8	B2	180.0	760.0
40 Arsenic	7440-38-2	A	10.0	10.0
41 Assure	76578-12-6	D	590.0	6100.0
42 Asulam	3337-71-1	D	3300.0	34000.0



REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
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CLIENT: Don P. Hanson
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Lab Number : CL-3160-1
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 2 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED	
FD-1, Can #11	Air	P. J. Wilhelmson	06/27/95 0953	06/28/95	
CONSTITUENT		*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
1,3-Dichlorobenzene		10.	ND	ND	
1,4-Dichlorobenzene		10.	ND	ND	
1,1-Dichloroethane		5.	320.	1300.	
1,2-Dichloroethane (EDC)		10.	ND	ND	
1,1-Dichloroethene		10.	ND	ND	
cis-1,2-Dichloroethane		10.	70.	270.	
trans-1,2-Dichloroethane		10.	110.	420.	
Dichloromethane		50.	ND	ND	
1,2-Dichloropropane		5.	ND	ND	
cis-1,3-Dichloropropene		5.	ND	ND	
trans-1,3-Dichloropropene		5.	ND	ND	
Ethylbenzene		10.	ND	ND	
2-Hexanone		5.	ND	ND	
4-Methyl-2-Pentanone (MIBK)		5.	ND	ND	
Styrene		10.	ND	ND	
1,1,2,2-Tetrachloroethane		5.	ND	ND	
Tetrachloroethene (PCE)		5.	ND	ND	
Toluene		10.	50.	180.	
1,1,1-Trichloroethane (TCA)		10.	ND	ND	
1,1,2-Trichloroethane		10.	ND	ND	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; AZIA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

07/06/95
MS1/1E38P
GD/nagcc(dw)
LF30MS1*A



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SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
FD-1, Can #11	Air	P. J. Wilhelmsen	06/27/95 0953	06/28/95
CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
Trichloroethene (TCE)	5.	ND	ND	
Trichlorofluoromethane (F-11)	10.	ND	ND	
Trichlorotrifluoroethane (F-113)	10.	ND	ND	
Vinyl Acetate	20.	ND	ND	
Vinyl Chloride	10.	470.	1000.	
Xylenes (Total)	10.	50.	230.	
Percent Surrogate Recovery			118.	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

07/06/95
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GD/nagcc (dw)
LF30MS1*A

REPORT OF LABORATORY ANALYSIS

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Lab Number : CL-3160-2
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 2 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
PP-4 @ 19, Can #13	Air	P. J. Wilhelmsen	06/27/95 1123	06/28/95
CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
1,3-Dichlorobenzene	10.	ND	ND	
1,4-Dichlorobenzene	10.	ND	ND	
1,1-Dichloroethane	5.	ND	ND	
1,2-Dichloroethane (EDC)	10.	ND	ND	
1,1-Dichloroethene	10.	ND	ND	
cis-1,2-Dichloroethene	10.	ND	ND	
trans-1,2-Dichloroethene	10.	ND	ND	
Dichloromethane	50.	ND	ND	
1,2-Dichloropropane	5.	ND	ND	
cis-1,3-Dichloropropene	5.	ND	ND	
trans-1,3-Dichloropropene	5.	ND	ND	
Ethylbenzene	10.	ND	ND	
2-Hexanone	5.	ND	ND	
4-Methyl-2-Pentanone (MIBK)	5.	ND	ND	
Styrene	10.	ND	ND	
1,1,2,2-Tetrachloroethane	5.	ND	ND	
Tetrachloroethene (PCE)	5.	ND	ND	
Toluene	10.	40.	160.	
1,1,1-Trichloroethane (TCA)	10.	ND	ND	
1,1,2-Trichloroethane	10.	ND	ND	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

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SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
PP-4 @ 19, Can #13	Air	P. J. Wilhelmsen	06/27/95 1123	06/28/95
CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
Trichloroethene (TCE)	5.	ND	ND	
Trichlorofluoromethane (F-11)	10.	ND	ND	
Trichlorotrifluoroethane (F-113)	10.	ND	ND	
Vinyl Acetate	20.	ND	ND	
Vinyl Chloride	10.	210.	460.	
Xylenes (Total)	10.	90.	400.	
Percent Surrogate Recovery			108.	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2IA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

07/06/95
MS1/1E39P
GD/nagcc(dw)
LF30MS1*A

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- Environmental Protection Agency (USEPA), 1983, *Methods for chemical analysis of water and wastes*: Environmental Monitoring Support Laboratory, EPA-600/4-79-020, Cincinnati, Ohio.
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DETECTED COMPOUNDS FOR SOIL GAS SAMPLE PP-6 (19')

Constituent	Result (ug/l) 6-27-95	Duplicate 6-27-95
Acetone	<0.50	<0.05
Benzene	7.3	7.8
Chlorobenzene	69	77
Chloroethene	1.6	1.8
Chloromethane	0.20	<0.01
1,1-Dichloroethane (1,1-DCA)	1.3	1.3
cis-1,2-Dichloroethene (cis-1,2-DCE)	0.24	0.27
trans-1,2-Dichloroethene (trans-1,2-DCE)	0.39	0.42
Ethylbenzene	0.12	<0.01
Toluene	0.16	0.18
Vinyl Chloride	1.0	1.0
Xylenes	<0.01	0.23

Permanent gas probe PP-6 is located near the source area just east of the eastern well cluster. The duplicate sample was collected immediately after the original sample and submitted to the laboratory 'blind'.

DETECTED COMPOUNDS FOR SOIL GAS SAMPLE PP-7 (19')

Constituent	Result (ug/l) 6-27-95
Acetone	<0.05
Benzene	0.35
Chlorobenzene	3.2
Chloroethene	<0.01
Chloromethane	<0.01
1,1-Dichloroethane (1,1-DCA)	<0.005
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.01
trans-1,2-Dichloroethene (trans-1,2-DCE)	<0.01
Ethylbenzene	<0.01
Toluene	<0.01
Vinyl Chloride	0.32
Xylenes	<0.01

Paermanent gas probe PP-7 is located just east of the original Estes Landfill boundary between the relocated refuse and the Bradley Landfill.

DETECTED COMPOUNDS FOR SOIL GAS SAMPLE PP-4 (19')

Constituent	Result (ug/l) 6-27-95
Acetone	0.78
Benzene	1.0
Chlorobenzene	3.6
Chloroethene	<0.01
Chloromethane	<0.01
1,1-Dichloroethane (1,1-DCA)	<0.005
cis-1,2-Dichloroethene (cis-1,2-DCE)	<0.01
trans-1,2-Dichloroethene (trans-1,2-DCE)	<0.01
Ethylbenzene	<0.01
Toluene	0.16
Vinyl Chloride	0.46
Xylenes	0.40

Paermanent gas probe PP-4 is located near the western well cluster adjacent to recovery well EW-RW2.

Harding Lawson Associates

JUL 10 1995

RECEIVED

July 6, 1995

Don P. Hanson
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Re: PACE Project No.: CL3160
Client Reference: 32034-7.10, Estes

Dear Don P. Hanson:

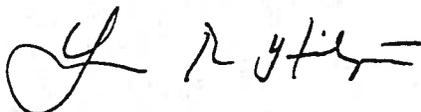
Enclosed is a report of laboratory analysis for the above referenced project. Samples were received under chain-of-custody at the Pace - Southern California Laboratory in Camarillo, California, on 06/28/95.

This report has been reviewed for accuracy and completeness and conforms to your analytical requirements.

If you have any questions regarding this report, require sampling supplies, field services or information on our analytical services, please call me at (805) 389-1353.

Sincerely,

Pace, Inc. - Southern California Laboratory



Laurence R. Hilpert, Ph.D.
Project Manager

This Cover Page is an integral part of the Analytical Report



REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

CLIENT: Don P. Hanson
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Lab Number : CL-3160-1
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 1 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
FD-1, Can #11	Air	P. J. Wilhelmsen	06/27/95 0953	06/28/95
CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
VOLATILE ORGANICS BY EPA TO-14				1,2
Acetone	50.	ND	ND	
Benzene	10.	2400.	7800.	
Bromodichloromethane	5.	ND	ND	
Bromomethane (Methyl Bromide)	10.	ND	ND	
Bromoform	5.	ND	ND	
1,3-Butadiene	20.	ND	ND	
2-Butanone (MEK)	20.	ND	ND	
Carbon Disulfide	100.	ND	ND	
Carbon Tetrachloride	10.	ND	ND	
Chlorobenzene	5.	17000.	77000.	
Chloroethane (Ethyl Chloride)	10.	680.	1800.	
2-Chloroethyl Vinyl Ether	50.	ND	ND	
Chloroform	20.	ND	ND	
Chloromethane (Methyl Chloride)	10.	ND	ND	
Dibromochloromethane	5.	ND	ND	
1,2-Dibromoethane (EDB)	10.	ND	ND	
1,2-Dichlorobenzene	10.	ND	ND	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) Concentration in ug/cu M or mg/cu M reported at 760mm Hg pressure and 298 deg. K.
(2) Canister was received under vacuum at -5 in. Hg and pressurized to 20 psig with He.

07/06/95
MS1/1E38P
GD/nagcc(dw)
LF30MS1*A

REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

CLIENT: Don P. Hanson
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Lab Number : CL-3160-2
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 1 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
PP-4 @ 19, Can #13	Air	P. J. Wilhelmsen	06/27/95 1123	06/28/95
CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
VOLATILE ORGANICS BY EPA TO-14				1,2
Acetone	50.	330.	780.	
Benzene	10.	310.	1000.	
Bromodichloromethane	5.	ND	ND	
Bromomethane (Methyl Bromide)	10.	ND	ND	
Bromoform	5.	ND	ND	
1,3-Butadiene	20.	ND	ND	
2-Butanone (MEK)	20.	ND	ND	
Carbon Disulfide	100.	ND	ND	
Carbon Tetrachloride	10.	ND	ND	
Chlorobenzene	5.	780.	3600.	
Chloroethane (Ethyl Chloride)	10.	ND	ND	
2-Chloroethyl Vinyl Ether	50.	ND	ND	
Chloroform	20.	ND	ND	
Chloromethane (Methyl Chloride)	10.	ND	ND	
Dibromochloromethane	5.	ND	ND	
1,2-Dibromoethane (EDB)	10.	ND	ND	
1,2-Dichlorobenzene	10.	ND	ND	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) Concentration in ug/cu M or mg/cu M reported at 760mm Hg pressure and 298 deg. K.
(2) Canister was received under vacuum at -5 in. Hg and pressurized to 20 psig with He.

07/06/95
MS1/1E39P
GD/nagcc(dw)
LF30MS1*A

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-11	EW-12	EW-13	EW-14	EW-E	EW-NE	EW-NW	EW-W	EW-W	EW-OE	EW-RW1	EW-RW1
DATE SAMPLED	12/06/91	12/06/91	12/06/91	12/09/91	12/10/91	12/06/91	12/09/91	12/09/91	12/09/91	12/11/91	12/11/91	12/11/91
DATE ANALYZED	12/10/91	12/10/91	12/10/91	12/10/91	12/11/91	12/10/91	12/10/91	12/11/91	12/17/91	12/13/91	12/26/91	12/13/91
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO	FO	FD	FO	FO	FD
CHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
VINYL CHLORIDE	<0.2	<0.2	<0.2	2.0	770	<0.2	0.52	52	44	<0.2	490 J	280
CHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	0.59	<0.2	<0.2 UJ	<0.2
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<2.0	<100	<2.0	<2.0	<10	<2.0	<2.0	<2.0 UJ	<2.0
1,1-DICHLOROETHENE	<0.2	4.7	3.1	8.5	<10	<0.2	<0.2	<1.0	<0.2	<0.2	1.5 J	2.3
1,1-DICHLOROETHANE	<0.2	3.4	0.58	5.4	<10	<0.2	<0.2	<1.0	1.63	<0.2	1.7 J	2.6
1,2-DICHLOROETHENE (CIS/TRANS)	<0.2	5.3	1.1	12	1,400	<0.2	0.51	54	57	<0.2	1,700 J	1,400
1,2-DICHLOROETHENE (CIS)	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	1.1	<0.2	15 J	15
1,2-DICHLOROETHENE (TRANS)	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
CHLOROFORM	5.5	1.2	7.4	0.91	<10	0.62	3.4	<1.0	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	2.4	5.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	0.29 J	1.5
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	0.67	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
1,1,1-TRICHLOROETHANE	<0.2	1.3	<0.2	1.7	<10	<0.2	1.3	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
BROMODICHLOROMETHANE	<0.2	<0.2	1.4	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
TRICHLOROETHENE	<0.2	26	56	25	10	<0.2	<0.2	<1.0	0.73	<0.2	28 J	33
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
EDB (1,2-DIBROMOETHANE)	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
BROMOFORM	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
CHLOROBENZENE-601	<0.2	<0.2	0.22	0.63	24	<0.2	<0.2	5.0	6.4	<0.2	8.1 J	8.7
DICHLORODIFLUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
TRICHLOROFUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	8.4 J	7.3
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<0.2	<10	<0.2	<0.2	<1.0	<0.2	<0.2	<0.2 UJ	<0.2
TETRACHLOROETHENE	<0.2	0.38	0.26	2.3	<10	<0.2	<0.2	<1.0	<0.2	<0.2	0.33 J	0.40
BENZENE	<0.5	<0.5	<0.5	<0.5	<25	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5
TOLUENE	<0.5	<0.5	0.51	0.56	<25	0.51	<0.5	<2.5	0.67	<0.5	0.76 J	0.62
CHLOROBENZENE-602	<0.5	<0.5	<0.5	0.75	27	<0.5	<0.5	8.0	7.0	<0.5	9.2 J	9.3
ETHYL BENZENE	<0.5	<0.5	<0.5	<0.5	<25	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5 UJ	<0.5
1,2-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	1.2	71	<1.0	<1.0	18	16	<1.0	32 J	32
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<50	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0 UJ	<1.0
1,4-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<50	<1.0	<1.0	<5.0	1.6	<1.0	2.0 J	2.1
TOTAL XYLENES	.	.	.	.	.	.	.	.	.	.	.	.

FD = Field Duplicate, FO = Field Original
 U - Analyte not detected above reported sample quantification limit
 J - Analyte positively identified, reported concentration is approximate
 NJ - Analyte tentatively identified, reported concentration is approximate
 UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
 R - Sample results are rejected due to serious deficiencies in QC
 B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
 D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	BW-P	BW-SD	BW-WD	EW-1	EW-4	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9	EW-10
DATE SAMPLED	12/10/91	12/10/91	12/10/91	12/06/91	12/11/91	12/11/91	12/11/91	12/10/91	12/06/91	12/09/91	12/12/91	12/06/91
DATE ANALYZED	12/11/91	12/17/91	12/11/91	12/10/91	12/13/91	12/13/91	12/13/91	12/11/91	12/10/91	12/11/91	12/13/91	12/10/91
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
BROMOMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
VINYL CHLORIDE	<0.2	<0.2	12	0.40	43	36	44	94	<0.2	<0.2	0.58	<0.2
CHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	0.73	<2.0	<10	<0.2	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<100	<0.2	<0.2	<2.0	<2.0
1,1-DICHLOROETHENE	<0.2	<0.2	<0.2	0.58	0.42	<0.2	<2.0	<10	0.40	<0.2	<0.2	3.9
1,1-DICHLOROETHANE	<0.2	<0.2	2.1	1.1	1.5	1.5	<2.0	<10	<0.2	<0.2	<0.2	0.66
1,2-DICHLOROETHENE (CIS/TRANS)	.	.	.	.	.	.	.	.	.	.	.	.
1,2-DICHLOROETHENE (CIS)	<0.2	0.40	25	5.7	19	19	120	490	<0.2	<0.2	4.0	0.87
1,2-DICHLOROETHENE (TRANS)	<0.2	<0.2	<0.2	<0.2	0.45	0.48	<2.0	<10	<0.2	<0.2	<0.2	<0.2
CHLOROFORM	<0.2	<0.2	<0.2	0.27	1.2	1.1	<2.0	<10	<0.2	1.1	<0.2	2.1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	1.2	<0.2	<0.2	6.3
1,2-DICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
1,1,1-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	0.94	<0.2	0.43
CARBON TETRACHLORIDE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
BROMODICHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	1.0
1,2-DICHLOROPROPANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
TRICHLOROETHENE	<0.2	0.48	6.4	3.8	1.6	1.8	3.1	<10	1.8	<0.2	<0.2	50
DIBROMOCHLOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
1,1,2-TRICHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
EDB (1,2-DIBROMOETHANE)	.	.	.	.	.	.	.	.	.	.	.	.
BROMOFORM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
1,1,2,2-TETRACHLOROETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
CHLOROBENZENE-601	<0.2	<0.2	1.2	0.26	2.2	2.3	<2.0	<10	<0.2	<0.2	<0.2	<0.2
DICHLORODIFLUOROMETHANE	<0.2	<0.2	<0.2	<0.2	<0.2	0.61	<2.0	<10	<0.2	<0.2	<0.2	<0.2
TRICHLOROFUOROMETHANE	<0.2	<0.2	0.27	<0.2	0.56	0.41	<2.0	<10	<0.2	<0.2	<0.2	<0.2
2-CHLOROETHYL VINYL ETHER	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<10	<0.2	<0.2	<0.2	<0.2
TETRACHLOROETHENE	<0.2	<0.2	0.29	0.27	0.30	0.28	<2.0	<10	<0.2	<0.2	<0.2	0.34
BENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<25	<0.5	<0.5	<0.5	<0.5
TOLUENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	28	<0.5	0.56	<0.5	<0.5
CHLOROBENZENE-602	<0.5	<0.5	1.7	<0.5	3.0	2.7	<5.0	29	<0.5	<0.5	<0.5	<0.5
ETHYL BENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<25	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE-602	<1.0	<1.0	5.5	<1.0	10	7.7	15	<50	<1.0	<1.0	<1.0	<1.0
1,3-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<50	<1.0	<1.0	<1.0	<1.0
1,4-DICHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<50	<1.0	<1.0	<1.0	<1.0
TOTAL XYLENES	.	.	.	.	.	.	.	.	.	.	.	.

- FD = Field Duplicate, FO = Field Original
- U - Analyte not detected above reported sample quantification limit
- J - Analyte positively identified, reported concentration is approximate
- NJ - Analyte tentatively identified, reported concentration is approximate
- UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
- R - Sample results are rejected due to serious deficiencies in QC
- B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
- D - Compound analyzed at greater dilution than the rest of the run

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No /

If no, check the appropriate boxes. 12-24-93

- The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:

- The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

- 602 The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:
BENZENE: RPD = 21, LIMIT = 11
CHLORO BENZENE: RPD = 15, LIMIT = 10
- The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No /

If no, check the appropriate boxes. 12-20-93

- 601 The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:
TRICHLOROETHENE: % REC = 134, LIMIT = 117
- 601 The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:
TRICHLOROETHENE: % REC = 130, LIMIT = 117
- The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

- The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No /

If no, check the appropriate boxes.

⁶⁰¹ The matrix spike (MS) performed on 12-21-93 was (circle one) less than greater than the % accuracy limits as follows:
TRICHLOROETHENE: % REC = 126, LIMIT = 117

⁶⁰¹ The matrix spike duplicate (MSD) performed on _____ (circle one) was less than greater than the % accuracy limits as follows:
TRICHLOROETHENE % REC = 122, LIMIT = 117

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No /

If no, check the appropriate boxes.

⁶⁰¹ The matrix spike (MS) performed on 12-21-93 was (circle one) less than greater than the % accuracy limits as follows:
TRICHLOROETHENE: % REC = 138, LIMIT = 117

⁶⁰¹ The matrix spike duplicate (MSD) performed on _____ (circle one) was less than greater than the % accuracy limits as follows:
TRICHLOROETHENE: % REC = 132, LIMIT = 117

The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

The analytical data were qualified for the following reason:

Comments:

Were matrix spike recoveries reviewed and found to meet data control limits? Yes ___ No ___

If no, check the appropriate boxes.

- The matrix spike (MS) performed on _____ was (circle one) less than/greater than the % accuracy limits as follows:

- The matrix spike duplicate (MSD) performed on _____ (circle one) was less than/greater than the % accuracy limits as follows:

- The relative percent difference (RPD) between the MS and the MSD exceeded the upper control limits as follows:

- The analytical data were qualified for the following reason:

Comments:

Were surrogate recoveries found to be within acceptable QC limits? Yes No ___

If no, check the appropriate boxes.

- The VOC surrogate recovery was greater than the upper acceptance limit as discussed for the following samples:

- Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were not qualified.
- The VOC surrogate recovery was greater than or equal to 10% but less than the lower acceptance limit as discussed for the following samples:

- Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were qualified as approximated "UJ".
- The VOC surrogate recovery was less than 10% as discussed for the following samples:

Therefore, detected VOCs were qualified as estimated "J". Non-detected VOCs were rejected "R".

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than the upper acceptance limit as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were not qualified.

- Two or more SVOC surrogates in the same semivolatile fraction have a recovery greater than or equal to 10% but less than the lower acceptance limit discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both were qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were qualified as approximated "UJ".

- The SVOC surrogate recovery was less than 10% as discussed for the following samples:

The semivolatile fraction for acid, base/neutral, or both was qualified. Detected SVOCs were qualified as estimated "J". Non-detected SVOCs were rejected "R".

Comments:

Were concentrations of any analyses found in the method blanks? Yes No

If yes, list the detected constituents and their associated concentration.

Comments:

- METHOD BLANK ON 12/26/93 CONTAINED 1.2 µg/l OF 1,2-DICHLOROETHENE.
- METHOD BLANK ON 12/27/93 CONTAINED 4.7 µg/l OF METHYLENE CHLORIDE.
- METHOD BLANK ON 12/19/93 CONTAINED 5.5 µg/l OF METHYLENE CHLORIDE, AND 1.6 µg/l OF 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE.
- METHOD BLANK ON 12/20/93 CONTAINED 5.1 µg/l OF METHYLENE CHLORIDE.

Were constituent concentrations in the database found to match the raw data? Yes No

Identify any discrepancies.

FIELD DUPLICATES WERE MISLABELED IN DATABASE AS FOLLOWS:

- EW-1, FD SHOULD BE EW-13, FD
- EW-2, FD SHOULD BE EW-17, FD
- EW-3, FD SHOULD BE EW-4, FD
- EW-4, FD SHOULD BE TW-4, FD

HARD COPY FOR EW-FD3 WAS NOT FOUND.

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-NW	EW-PZ1	EW-PZ2	EW-PZ3	EW-PZ4	EW-PZ5	EW-PZ6	EW-OE	SB-4	SB-6	TW-1	TW-3
DATE SAMPLED	12/10/93	12/13/93	12/13/93	12/13/93	12/09/93	12/14/93	12/14/93	12/13/93	12/10/93	12/10/93	12/07/93	12/07/93
DATE ANALYZED	12/24/93	12/26/93	12/26/93	12/27/93	12/21/93	12/27/93	12/26/93	12/26/93	12/25/93	12/24/93	12/19/93	12/19/93
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
BROMOMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
VINYL CHLORIDE	25	8,100	2,500	10,000	<1.0	260	860	<1.0	<1.0	<1.0	<1.0	2.8
CHLOROETHANE	<2.0	<2.0	<2.0	2.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
METHYLENE CHLORIDE	<2.0	6.0	7.3	<2.0	<2.0	14	6.0	8.6	2.4	3.9	<2.0	2.3
1,1-DICHLOROETHENE	<1.0	7.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.4	4.7	2.6	<1.0
1,1-DICHLOROETHANE	<1.0	7.6	2.4	5.3	<1.0	<1.0	<1.0	<1.0	2.7	1.0	5.5	<1.0
1,2-DICHLOROETHENE (CIS)	2.0	4,100	380	240	<1.0	39	26	<1.0	5.9	1.3	24	1.5
1,2-DICHLOROETHENE (TRANS)	<1.0	45	13	30	<1.0	<1.0	5.7	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	1.2	<1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<1.0	6.7	<1.0	<1.0	<1.0	14	1.2	2.0	1.1	1.7	2.7	2.3
1,2-DICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-TRICHLOROETHANE	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	3.4	<1.0
CARBON TETRACHLORIDE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BROMODICHLOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROPROPANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRANS-1,3-DICHLOROPROPENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	<1.0	28	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	17	26	9.1	<1.0
DIBROMOCHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
CIS-1,3-DICHLOROPROPENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BROMOFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-TETRACHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROBENZENE-601	<1.0	120	150	220	30	16	33	27	<1.0	<1.0	<1.0	<1.0
DICHLORODIFLUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TRICHLOROFLUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-CHLOROETHYL VINYL ETHER	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TETRACHLOROETHENE	<1.0	2.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	4.6	<1.0	4.1	<1.0
BENZENE-602	<1.0	7.8	7.7	12	<1.0	<1.0	2.2	<1.0	<1.0	<1.0	<1.0	<1.0
TOLUENE-602	<1.0	8.0	4.2	7.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROBENZENE-602	<1.0	97	140	220	40	15	41	29	<1.0	<1.0	<1.0	<1.0
ETHYLBENZENE-602	<1.0	83	58	6.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROBENZENE-602	<2.0	360	190	570	<2.0	18	48	<2.0	<2.0	<2.0	<2.0	<2.0
1,3-DICHLOROBENZENE-602	<2.0	3.5	<2.0	4.9	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-DICHLOROBENZENE-602	<2.0	18	12	26	7.6	<2.0	4.4	<2.0	<2.0	<2.0	<2.0	<2.0
TOTAL XYLENES-602	<2.0	84	160	20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

- FD = Field Duplicate, FO = Field Original
- U - Analyte not detected above reported sample quantification limit
- J - Analyte positively identified, reported concentration is approximate
- NJ - Analyte tentatively identified, reported concentration is approximate
- UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
- R - Sample results are rejected due to serious deficiencies in QC
- B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
- D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	TW-4	TW-4
DATE SAMPLED	12/07/93	12/07/93
DATE ANALYZED	12/19/93	12/19/93
SAMPLE CODE	FO	FD
CHLOROMETHANE	<2.0	<2.0
BROMOMETHANE	<2.0	<2.0
VINYL CHLORIDE	<1.0	<1.0
CHLOROETHANE	<2.0	<2.0
METHYLENE CHLORIDE	<2.0	2.5
1,1-DICHLOROETHENE	<1.0	<1.0
1,1-DICHLOROETHANE	<1.0	<1.0
1,2-DICHLOROETHENE (CIS)	<1.0	<1.0
1,2-DICHLOROETHENE (TRANS)	<1.0	<1.0
CHLOROFORM	<1.0	<1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<1.0	<1.0
1,2-DICHLOROETHANE	<1.0	<1.0
1,1,1-TRICHLOROETHANE	<1.0	<1.0
CARBON TETRACHLORIDE	<1.0	<1.0
BROMODICHLOROMETHANE	<1.0	<1.0
1,2-DICHLOROPROPANE	<1.0	<1.0
TRANS-1,3-DICHLOROPROPENE	<1.0	<1.0
TRICHLOROETHENE	<1.0	<1.0
DIBROMOCHLOROMETHANE	<2.0	<2.0
CIS-1,3-DICHLOROPROPENE	<2.0	<2.0
1,1,2-TRICHLOROETHANE	<1.0	<1.0
BROMOFORM	<1.0	<1.0
1,1,2,2-TETRACHLOROETHANE	<1.0	<1.0
CHLOROBENZENE-601	<1.0	<1.0
DICHLORODIFLUOROMETHANE	<2.0	<2.0
TRICHLOROFLUOROMETHANE	<2.0	2.0
2-CHLOROETHYL VINYL ETHER	<2.0	<2.0
TETRACHLOROETHENE	<1.0	<1.0
BENZENE-602	<1.0	<1.0
TOLUENE-602	<1.0	<1.0
CHLOROBENZENE-602	<1.0	<1.0
ETHYLBENZENE-602	<1.0	<1.0
1,2-DICHLOROBENZENE-602	<2.0	<2.0
1,3-DICHLOROBENZENE-602	<2.0	<2.0
1,4-DICHLOROBENZENE-602	<2.0	<2.0
TOTAL XYLENES-602	<2.0	<2.0

FD = Field Duplicate, FO = Field Original

U - Analyte not detected above reported sample quantification limit

J - Analyte positively identified, reported concentration is approximate

NJ - Analyte tentatively identified, reported concentration is approximate

UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte

R - Sample results are rejected due to serious deficiencies in QC

B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs

D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	BW-SD	BW-SES	BW-WD	EW-1	EW-2	EW-4	EW-4	EW-5	EW-6	EW-7	EW-8	EW-9
DATE SAMPLED	12/07/93	12/07/93	12/07/93	12/08/93	12/08/93	12/09/93	12/09/93	12/14/93	12/14/93	12/09/93	12/10/93	12/10/93
DATE ANALYZED	12/19/93	12/19/93	12/19/93	12/20/93	12/20/93	12/20/93	12/21/93	12/27/93	12/26/93	12/20/93	12/24/93	12/24/93
SAMPLE CODE	FO	FO	FO	FO	FO	FO	FD	FO	FO	FO	FO	FO
CHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
BROMOMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
VINYL CHLORIDE	<1.0	<1.0	200	<1.0	<1.0	61	60	910	7,600	<1.0	<1.0	200
CHLOROETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
METHYLENE CHLORIDE	<2.0	<2.0	<2.0	7.8	7.3	7.2	<2.0	5.3	<2.0	7.5	<2.0	<2.0
1,1-DICHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	<1.0	<1.0	2.9	<1.0	<1.0	<1.0	<1.0	1.4	5.4	<1.0	<1.0	<1.0
1,2-DICHLOROETHENE (CIS)	1.1	1.3	120	<1.0	<1.0	30	35	230	470	<1.0	<1.0	12
1,2-DICHLOROETHENE (TRANS)	<1.0	<1.0	4.1	<1.0	<1.0	<1.0	<1.0	6.2	34	<1.0	<1.0	1.6
CHLOROFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1.7	<1.0	<1.0	4.3	3.4	1.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CARBON TETRACHLORIDE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BROMODICHLOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROPROPANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRANS-1,3-DICHLOROPROPENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	<1.0	1.4	3.5	<1.0	<1.0	<1.0	<1.0	5.8	<1.0	1.0	<1.0	<1.0
DIBROMOCHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
CIS-1,3-DICHLOROPROPENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BROMOFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-TETRACHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROBENZENE-601	<1.0	<1.0	16	<1.0	<1.0	4.5	4.8	19	280	<1.0	<1.0	18
DICHLORODIFLUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TRICHLOROFUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-CHLOROETHYL VINYL ETHER	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TETRACHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BENZENE-602	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	1.2	12	<1.0	<1.0	<1.0
TOLUENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.8	<1.0	<1.0	<1.0
CHLOROBENZENE-602	<1.0	<1.0	16	<1.0	<1.0	4.8	4.9	20	270	<1.0	<1.0	16
ETHYLBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	68	<1.0	<1.0	<1.0
1,2-DICHLOROBENZENE-602	<2.0	<2.0	34	<2.0	<2.0	6.9	6.6	45	500	<2.0	<2.0	11
1,3-DICHLOROBENZENE-602	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	4.2	<2.0	<2.0	<2.0
1,4-DICHLOROBENZENE-602	<2.0	<2.0	4.5	<2.0	<2.0	<2.0	<2.0	3.0	25	<2.0	<2.0	2.0
TOTAL XYLENES-602	<2.0	<2.0	<2.0	<2.0	<2.0	2.3	<2.0	<2.0	33	<2.0	<2.0	<2.0

FD = Field Duplicate, FO = Field Original

- U - Analyte not detected above reported sample quantification limit
- J - Analyte positively identified, reported concentration is approximate
- NJ - Analyte tentatively identified, reported concentration is approximate
- UJ - Analyte not detected above reported quantitation limit, but limit is approximate and may not represent the actual quantitation needed to measure the analyte
- R - Sample results are rejected due to serious deficiencies in QC
- B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
- D - Compound analyzed at greater dilution than the rest of the run

Table 1
Results of 601/602 Analyses in µg/L

WELL	EW-10	EW-11	EW-12	EW-13	EW-13	EW-14	EW-15	EW-16	EW-17	EW-17	EW-18	EW-NE
DATE SAMPLED	12/08/93	12/09/93	12/08/93	12/08/93	12/08/93	12/09/93	12/15/93	12/15/93	12/16/93	12/16/93	12/15/93	12/10/93
DATE ANALYZED	12/20/93	12/20/93	12/20/93	12/20/93	12/20/93	12/20/93	12/26/93	12/27/93	12/27/93	12/27/93	12/26/93	12/24/93
SAMPLE CODE	FO	FO	FO	FO	FD	FO	FO	FO	FO	FO	FO	FO
CHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
BROMOMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
VINYL CHLORIDE	<1.0	6.3	<1.0	<1.0	<1.0	20	1,700	<1.0	<1.0	<1.0	1,100	<1.0
CHLOROETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
METHYLENE CHLORIDE	4.1	<2.0	<2.0	<2.0	3.8	8.1	<2.0	2.8	<2.0	<2.0	<2.0	3.9
1,1-DICHLOROETHENE	4.1	<1.0	1.5	4.2	5.0	3.9	<1.0	<1.0	4.2	5.1	<1.0	<1.0
1,1-DICHLOROETHANE	<1.0	<1.0	2.9	<1.0	1.1	8.1	2.2	<1.0	1.2	1.6	2.4	<1.0
1,2-DICHLOROETHENE (CIS)	<1.0	<1.0	9.6	1.3	1.6	46	1,100	<1.0	1.9	2.9	330	<1.0
1,2-DICHLOROETHENE (TRANS)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	14	<1.0	<1.0	<1.0	7.7	<1.0
CHLOROFORM	1.3	<1.0	<1.0	2.2	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	4.2	<1.0	<1.0	1.3	3.9	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CARBON TETRACHLORIDE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BROMODICHLOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROPROPANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRANS-1,3-DICHLOROPROPENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	21	<1.0	8.4	32	36	17	3.2	<1.0	9.5	11	1.2	<1.0
DIBROMOCHLOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
CIS-1,3-DICHLOROPROPENE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BROMOFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-TETRACHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROBENZENE-601	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	21	24	<1.0	<1.0	51	<1.0
DICHLORODIFLUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TRICHLOROFUOROMETHANE	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-CHLOROETHYL VINYL ETHER	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TETRACHLOROETHENE	<1.0	<1.0	1.2	<1.0	<1.0	3.1	<1.0	<1.0	1.7	3.1	<1.0	<1.0
BENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0	<1.0	6.9	3.6	3.6	<1.0
TOLUENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0
CHLOROBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	22	33	<1.0	<1.0	55	<1.0
ETHYLBENZENE-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-DICHLOROBENZENE-602	<2.0	<2.0	<2.0	<2.0	<2.0	4.6	93	<2.0	<2.0	<2.0	67	<2.0
1,3-DICHLOROBENZENE-602	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-DICHLOROBENZENE-602	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	4.5	6.5	<2.0	<2.0	7.4	<2.0
TOTAL XYLENES-602	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

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- U - Analyte not detected above reported sample quantification limit
- J - Analyte positively identified, reported concentration is approximate
- NJ - Analyte tentatively identified, reported concentration is approximate
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- R - Sample results are rejected due to serious deficiencies in QC
- B - Compound detected in associated blank at <10X blank concentration for non-VOC laboratory contaminants, and <5X blank concentrations for other VOCs
- D - Compound analyzed at greater dilution than the rest of the run

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Sort	Compound Name	12/21/93	12/19/93	12/19/93	12/19/93	12/20/93	12/20/93	12/20/93	12/27/93	
-FD = F		1	2	3	4	5	6	7	8	9
		PZ-4	BW-SD	BW-SES	BW-WD	EW-1	EW-1-EW-13	EW-2	EW-2-EW-17	EW-3
		12/09/93	12/07/93	12/07/93	12/07/93	12/08/93	12/08/93	12/08/93	12/16/93	12/09/93
		FO	FO	FO	FO	FO	FD	FO	FD	FD
0	WELL									
0	DATE	PZ-4	BW-SD	BW-SES	BW-WD	EW-1	EW-1-EW-13	EW-2	EW-2-EW-17	EW-3
0	SAMPLE CODE	12/09/93	12/07/93	12/07/93	12/07/93	12/08/93	12/08/93	12/08/93	12/16/93	12/09/93
0		FO	FO	FO	FO	FO	FD	FO	FD	FD
1	Chloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2	Bromomethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
3	Vinyl chloride	<1.0	<1.0	<1.0	200	<1.0	<1.0	<1.0	<1.0	<2.0
4	Chloroethane	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	60
5	Methylene chloride	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
6	1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	7.8	3.8	7.3	<2.0	<2.0
7	1,1-Dichloroethane	<1.0	<1.0	<1.0	2.9	<1.0	5.0	<1.0	5.1	<1.0
9	1,2-Dichloroethene (cis)	<1.0	1.1	1.3	120	<1.0	1.1	<1.0	1.6	<1.0
9	1,2-Dichloroethene (trans)	<1.0	<1.0	<1.0	4.1	<1.0	1.6	<1.0	2.9	35
9	Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0	1.7	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0
11	1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	4.3	3.9	3.4	<1.0	<1.0
12	1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
13	Carbon Tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
14	Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
15	1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
16	trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
17	Trichloroethene	<1.0	<1.0	1.4	3.5	<1.0	<1.0	<1.0	11	<1.0
18	Dibromochloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
19	cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
20	1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
22	Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
23	1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
25	Chlorobenzene-601	30	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
27	Benzene	<1.0	<1.0	<1.0	16	<1.0	<1.0	<1.0	<1.0	4.8
28	Toluene	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	3.6	<1.0
28	Chlorobenzene-602	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
30	Ethyl benzene	<1.0	<1.0	<1.0	16	<1.0	<1.0	<1.0	<1.0	4.9
31	1,3-Dichlorobenzene	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
32	1,4-Dichlorobenzene	7.6	<2.0	<2.0	4.5	<2.0	<2.0	<2.0	<2.0	<2.0
33	1,2-Dichlorobenzene	<2.0	<2.0	<2.0	34	<2.0	<2.0	<2.0	<2.0	6.6
35	Dichlorodifluoromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
37	Trichlorofluoromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
41	2-Chloroethyl Vinyl Ether	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
42	Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0
43	Total xylenes	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.1	<1.0

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Port	Compound Name	12/19/93	12/20/93	12/20/93	12/20/93	12/20/93	12/21/93	12/24/93	12/20/93	12/20/93
FD = F		10	11	12	13	14	15	16	17	18
0	WELL									
0	DATE	12/07/93	12/09/93	12/14/93	12/14/93	12/09/93	12/10/93	12/10/93	12/08/93	12/09/93
0	SAMPLE CODE	FD	FO	FO	FO	FO	FO	FO	FO	FO
0										
1	Chloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2	Bromomethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
3	Vinyl chloride	<1.0	61	910	7,600	<1.0	<1.0	<1.0	<1.0	6.3
4	Chloroethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
5	Methylene chloride	2.5	7.2	5.3	<2.0	7.5	<2.0	<2.0	4.1	<2.0
6	1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.1	<1.0
7	1,1-Dichloroethane	<1.0	<1.0	1.4	5.4	<1.0	<1.0	<1.0	<1.0	<1.0
9	1,2-Dichloroethene (cis)	<1.0	30	230	470	<1.0	<1.0	12	<1.0	<1.0
9	1,2-Dichloroethene (trans)	<1.0	<1.0	6.2	34	<1.0	<1.0	1.6	<1.0	<1.0
9	Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0
10	1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0	1.8	<1.0	<1.0	2.9	<1.0	<1.0	4.2	<1.0
11	1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
12	1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
13	Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
14	Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
15	1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
16	trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
17	Trichloroethene	<1.0	<1.0	5.8	<1.0	1.0	<1.0	<1.0	21	<1.0
18	Dibromochloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
19	cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
20	1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
22	Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
23	1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
25	Chlorobenzene-601	<1.0	4.5	19	280	<1.0	<1.0	18	<1.0	<1.0
27	Benzene	<1.0	<1.0	1.2	12	<1.0	<1.0	<1.0	<1.0	<1.0
28	Toluene	<1.0	<1.0	<1.0	6.8	<1.0	<1.0	<1.0	<1.0	<1.0
28	Chlorobenzene-602	<1.0	4.8	20	270	<1.0	<1.0	16	<1.0	<1.0
30	Ethyl benzene	<1.0	<1.0	<1.0	68	<1.0	<1.0	<1.0	<1.0	<1.0
31	1,3-Dichlorobenzene	<2.0	<2.0	<2.0	4.2	<2.0	<2.0	<2.0	<2.0	<2.0
32	1,4-Dichlorobenzene	<2.0	<2.0	3.0	25	<2.0	<2.0	2.0	<2.0	<2.0
33	1,2-Dichlorobenzene	<2.0	6.9	45	500	<2.0	<2.0	11	<2.0	<2.0
35	Dichlorodifluoromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
37	Trichlorofluoromethane	2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
41	2-Chloroethyl Vinyl Ether	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
42	Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
43	Total xylenes	<2.0	2.3	<2.0	33	<2.0	<2.0	<2.0	<2.0	<2.0

Harding Lawson Associates
 Attn: Don Hanson
 2800 N. 44th Street, #500
 Phoenix, AZ 85008

Date Sampled: 21 May 96
 Date Received: 22 May 96
 Date Extracted: 21 May 96
 Date Analyzed: 03 Jun 96
 Date Reported: 13 Jun 96
 McKenzie I.D.: E96-4864
 Units Reported: µg/Kg (ppb)
 Job No.: 34529-6.1
 Project Name: Estes LF.
 Sample Weight: 25.6 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>B-1-80T</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	<50	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	<200	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50

Surrogate Recovery (%)
 1-Chloro-4-fluorobenzene (PID) 91
 1-Chloro-4-fluorobenzene (ELCD) 110

MRL = Minimum Reporting Limit

Tracey L. Hockett
 Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
 Attn: Don Hanson
 2800 N. 44th Street. #500
 Phoenix, AZ 85008

Date Sampled: 21 May 96
 Date Received: 22 May 96
 Date Extracted: 21 May 96
 Date Analyzed: 03 Jun 96
 Date Reported: 13 Jun 96
 McKenzie I.D.: E96-4867
 Units Reported: µg/Kg (ppb)
 Job No.: 34529-6.1
 Project Name: Estes LF.
 Sample Weight: 25.6 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>B-1-92B</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	<50	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	<200	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50

Surrogate Recovery (%)
 1-Chloro-4-fluorobenzene (PID) 91
 1-Chloro-4-fluorobenzene (ELCD) 100

MRL = Minimum Reporting Limit

Maja Gradnick for Tracey Hockett
 Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
 Attn: Don Hanson
 2800 N. 44th Street, #500
 Phoenix, AZ 85008

Date Sampled: 21 May 96
 Date Received: 22 May 96
 Date Analyzed: 03 Jun 96
 Date Reported: 13 Jun 96
 McKenzie I.D.: E96-4868
 Units Reported: µg/L (ppb)
 Job No.: 34529-6.1
 Project Name: Estes LF.

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>EW-TB1</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	<50	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	<200	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	140*	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50
Surrogate Recovery (%)		
1-Chloro-4-fluorobenzene (PID)	103	
1-Chloro-4-fluorobenzene (ELCD)	102	

MRL = Minimum Reporting Limit

**The Trichloroethene detected in this sample was due to background laboratory contamination. An Out of Control Event Form has been generated.*

Maja Gradwick for Tracey Hockett
 Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
 Attn: Don Hanson
 2800 N. 44th Street. #500
 Phoenix, AZ 85008

Date Sampled: 21 May 96
 Date Received: 22 May 96
 Date Extracted: 21 May 96
 Date Analyzed: 03 Jun 96
 Date Reported: 13 Jun 96
 McKenzie I.D.: E96-4866, 4865
 Units Reported: µg/Kg (ppb)
 Job No.: 34529-6.1
 Project Name: Estes LF.
 Sample Weight: 25.8 g (E96-4866)
 Sample Weight: 26.5 g (E96-4865)

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

Quality Control Data

Client I.D.: MS-1. MS+1D

Compound	Sample Result	Conc.** Expected	Spiked Sample	% Rec.	Dup. Spiked Sample	Dup. % Rec.	RPD
Benzene	<50*	480	350	73	342	71	2
1,2-Dichlorobenzene	<50*	480	350	73	336	70	4
1,1-Dichloroethene	<50*	480	314	65	307	64	2
Tetrachloroethene	<50*	480	358	75	342	71	5
Toluene	<50*	480	365	76	349	73	4
1,1,1-Trichloroethane	<50*	480	329	69	352	73	7
Trichloroethene	<50*	480	290	60	334	70	14

$$\% \text{ Recovery} = \frac{\text{Spiked Sample Result} - \text{Sample Result}}{\text{Concentration Expected}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{\text{Spiked Sample Result} - \text{Duplicate Spiked Sample Result}}{\text{Average of Spiked Samples}} \times 100$$

* The spiked sample is assumed to be B-1-80T (E96-4864) since the sampling time matches that of the spike and spike dup.

**Based on 20.0 grams of soil extracted, 20.0 mL of surrogate spiked Methanol and an additional 1.0 mL of standard spiked. (21.0 mL total).

Maja Cradesick for Tracey Hockett
 Tracey L. Hockett, Organic Laboratory Supervisor



Harison Lawson Associates
 2800 N 44th St. #500
 Phoenix, Arizona 85008
 (602) 224-0644 • FAX (602) 224-5133

CHAIN OF CUSTODY FORM

Lab: McKenzie

Job Number: 34529 - 6.1
 Name/Location: Estes L.F.
 Project Manager: Don Hanson.

Samplers: Paul Plato
Christaan Culbertson
 Recorder: [Signature]
(Signature Required)

ANALYSIS REQUESTED							

SOURCE CODE	MATRIX		# CONTAINERS & PRESERV					HLA SAMPLE NUMBER	LAB NUMBER	DATE				STATION DESCRIPTION/ NOTES
	Water	Soil	H ₂ S	HNO ₃	HCL	Ice	McTherapy			Yr	Mo	Day	Time	
48	X							B-1-72.0	296-4862	96	05	21	0907	Preserved
48	X							EW-FB1	4863	96	05	21	0914	"
48	X							B-1-80T	4864	96	05	21	1145	"
48	X							MS+10	4865	96	05	21	1145	"
48	X							MS-1	4866	96	05	21	1145	"
48	X							B-1-92B	4867	96	05	21	1518	"
48	X							EW-TB1	4868	96	05	21		

MISCELLANEOUS

*Please: Note Sample Condition.
 Level IV GC package requested.
 Normal TAT.*

*NOTE: Samples stored in HLA Refrigerator
 night of 5/21 - 5/22.*

CHAIN OF CUSTODY RECORD		
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
<u>[Signature]</u>	<u>[Signature]</u>	22 MAY 96 10:5
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
SAMPLE CONDITION WHEN RECEIVED BY THE LABORATORY		
Received cold: Y/N	Received Intact: Y/N	

Harding Lawson Associates
 Attn: Donald Hanson
 2800 N. 44th Street, #500
 Phoenix, AZ 85008

Harding Lawson Associates

JUN 20 1996

RECEIVED

Date Sampled: 24 May 96
 Date Received: 28 May 96
 Date Extracted: 24 May 96
 Date Analyzed: 06 Jun 96
 Date Reported: 18 Jun 96
 McKenzie I.D.: E96-5047
 Units Reported: µg/Kg (ppb)
 Project No.: 34529-6.1
 Project Name: Estes
 Purchase Order: 34529-6.1
 Sample Weight: 25.5 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>B-2-65</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	64*	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	<200	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50
Surrogate Recovery (%)		
1-Chloro-4-fluorobenzene (PID)	92	
1-Chloro-4-fluorobenzene (ELCD)	97	

MRL = Minimum Reporting Limit

**The Dichlorodifluoromethane detected in this sample may be due to background contamination. An Out of Control Event Form has been generated.*

Tracey L. Hockett
 Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
Attn: Donald Hanson
2800 N. 44th Street, #500
Phoenix, AZ 85008

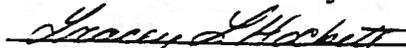
Date Sampled: 24 May 96
Date Received: 28 May 96
Date Extracted: 24 May 96
Date Analyzed: 06 Jun 96
Date Reported: 18 Jun 96
McKenzie I.D.: E96-5048
Units Reported: µg/Kg (ppb)
Project No.: 34529-6.1
Project Name: Estes
Purchase Order: 34529-6.1
Sample Weight: 27.1 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>B-2-70</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	62*	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	<200	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50
Surrogate Recovery (%)		
1-Chloro-4-fluorobenzene (PID)	94	
1-Chloro-4-fluorobenzene (ELCD)	101	

MRL = Minimum Reporting Limit

**The Dichlorodifluoromethane detected in this sample may be due to background contamination. An Out of Control Event Form has been generated.*


Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
Attn: Donald Hanson
2800 N. 44th Street, #500
Phoenix, AZ 85008

Date Sampled: 24 May 96
Date Received: 28 May 96
Date Extracted: 24 May 96
Date Analyzed: 06 Jun 96, 08 Jun 96
Date Reported: 18 Jun 96
McKenzie I.D.: E96-5049
Units Reported: µg/Kg (ppb)
Project No.: 34529-6.1
Project Name: Estes
Purchase Order: 34529-6.1
Sample Weight: 25.5 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

Compound	B-2-75	MRL
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	67*	50
1,3-Dichlorobenzene	53*	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	130**	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	<200	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50
Surrogate Recovery (%)		
1-Chloro-4-fluorobenzene (PID)	97	
1-Chloro-4-fluorobenzene (ELCD)	97	

MRL = Minimum Reporting Limit

* This sample was re-analyzed past the EPA recommended holding time. These compounds were below the MRL in the repeat. They may be due to background contamination. An Out of Control Event Form has been generated.

**The Dichlorodifluoromethane detected in this sample may be due to background contamination. An Out of Control Event Form has been generated.


Tracey L. Pickett, Organic Laboratory Supervisor

Harding Lawson Associates
 Attn: Donald Hanson
 2800 N. 44th Street, #500
 Phoenix, AZ 85008

Date Sampled: 24 May 96
 Date Received: 28 May 96
 Date Extracted: 24 May 96
 Date Analyzed: 06 Jun 96, 08 Jun 96
 Date Reported: 18 Jun 96
 McKenzie I.D.: E96-5050
 Units Reported: ug/Kg (ppb)
 Project No.: 34529-6.1
 Project Name: Estes
 Purchase Order: 34529-6.1
 Sample Weight: 26.6 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>B-2-80</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	220*	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	700*	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50
Surrogate Recovery (%)		
1-Chloro-4-fluorobenzene (PID)	103	
1-Chloro-4-fluorobenzene (ELCD)	102	

MRL = Minimum Reporting Limit

NOTE: This sample was re-analyzed past the EPA recommended holding time for confirmation only. No data was reported from the repeat analysis.

**The Dichlorodifluoromethane and Methylene chloride detected in this sample may be due to background contamination. An Out of Control Event Form has been generated.*


 Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
Attn: Donald Hanson
2800 N. 44th Street, #500
Phoenix, AZ 85008

Date Sampled: 24 May 96
Date Received: 28 May 96
Date Extracted: 24 May 96
Date Analyzed: 06 Jun 96, 08 Jun 96
Date Reported: 18 Jun 96
McKenzie I.D.: E96-5051
Units Reported: µg/Kg (ppb)
Project No.: 34529-6.1
Project Name: Estes
Purchase Order: 34529-6.1
Sample Weight: 26.0 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>B-2-85</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	240*	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	94*	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	580*	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50
Surrogate Recovery (%)		
1-Chloro-4-fluorobenzene (PID)	98	
1-Chloro-4-fluorobenzene (ELCD)	102	

MRL = Minimum Reporting Limit

**This sample was re-analyzed past the EPA recommended holding time. The Dichlorodifluoromethane, cis-1,2-Dichloroethene and Methylene chloride were below the MRL in the repeat. They may be due to background contamination. An Out of Control Event Form has been generated.*


Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
Attn: Donald Hanson
2800 N. 44th Street. #500
Phoenix, AZ 85008

Date Sampled: 24 May 96
Date Received: 28 May 96
Date Extracted: 24 May 96
Date Analyzed: 07 Jun 96
Date Reported: 18 Jun 96
McKenzie I.D.: E96-5052
Units Reported: µg/Kg (ppb)
Project No.: 34529-6.1
Project Name: Estes
Purchase Order: 34529-6.1
Sample Weight: 26.0 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>B-2-90</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	54	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	92	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	<50	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	280*	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50
Surrogate Recovery (%)		
1-Chloro-4-fluorobenzene (PID)	99	
1-Chloro-4-fluorobenzene (ELCD)	110	

MRL = Minimum Reporting Limit

**The Methylene chloride detected in this sample may be due to background contamination.
An Out of Control Event Form has been generated.*


Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
Attn: Donald Hanson
2800 N. 44th Street. #500
Phoenix, AZ 85008

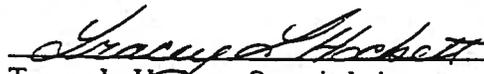
Date Sampled: 24 May 96
Date Received: 28 May 96
Date Analyzed: 07 Jun 96
Date Reported: 18 Jun 96
McKenzie I.D.: E96-5055
Units Reported: µg/L (ppb)
Project No.: 34529-6.1
Project Name: Estes
Purchase Order: 34529-6.1
Sample Weight: 26.0 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>EW-FB2</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	<50	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	640*	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50
Surrogate Recovery (%)		
1-Chloro-4-fluorobenzene (PID)	102	
1-Chloro-4-fluorobenzene (ELCD)	109	

MRL = Minimum Reporting Limit

**The Methylene chloride detected in this sample may be due to background contamination.
An Out of Control Event Form has been generated.*


Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
Attn: Donald Hanson
2800 N. 44th Street. #500
Phoenix, AZ 85008

Date Sampled: 24 May 96
Date Received: 28 May 96
Date Analyzed: 07 Jun 96
Date Reported: 18 Jun 96
McKenzie I.D.: E96-5056
Units Reported: µg/L (ppb)
Project No.: 34529-6.1
Project Name: Estes
Purchase Order: 34529-6.1
Sample Weight: 26.0 g

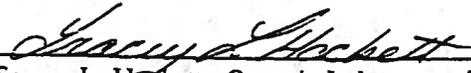
Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>EW-TB2</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	<50	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	460*	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50

Surrogate Recovery (%)
 1-Chloro-4-fluorobenzene (PID) 100
 1-Chloro-4-fluorobenzene (ELCD) 86

MRL = Minimum Reporting Limit

**The Methylene chloride detected in this sample may be due to background contamination. An Out of Control Event Form has been generated.*


 Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
Attn: Donald Hanson
2800 N. 44th Street, #500
Phoenix, AZ 85008

Date Sampled: 24 May 96
Date Received: 28 May 96
Date Extracted: 24 May 96
Date Analyzed: 07 Jun 96
Date Reported: 18 Jun 96
McKenzie I.D.: E96-5053, 5054
Units Reported: µg/Kg (ppb)
Project No.: 34529-6.1
Project Name: Estes
Purchase Order: 34529-6.1
Sample Weight: 26.8 g (B-2-90MS)
Sample Weight: 26.5 g (B-2-90SD)

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

Quality Control Data

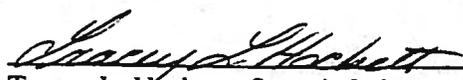
Client I.D.: B-2-90MS, B-2-90SD

Compound	Sample Result	Conc.* Expected	Spiked Sample	% Rec.	Dup. Spiked Sample	Dup. % Rec.	RPD
Benzene	<50	480	376	78	380	79	1
1,2-Dichlorobenzene	<50	480	396	82	406	85	2
1,1-Dichloroethene	<50	480	433	90	426	89	2
Tetrachloroethene	<50	480	389	81	390	81	<1
Toluene	<50	480	384	80	388	81	1
1,1,1-Trichloroethane	<50	480	420	88	444	92	6
Trichloroethene	<50	480	346	72	412	86	17

$$\% \text{ Recovery} = \frac{\text{Spiked Sample Result} - \text{Sample Result}}{\text{Concentration Expected}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{\text{Spiked Sample Result} - \text{Duplicate Spiked Sample Result}}{\text{Average of Spiked Samples}} \times 100$$

**Based on 20.0 grams of soil extracted, 20.0 mL of surrogate spiked Methanol and an additional 1.0 mL of standard spiked. (21.0 mL total).*


Tracey L. Hockett, Organic Laboratory Supervisor

Chain of Custody

DATE 5/28/96 PAGE 1 of 2

PROJECT MANAGER: Donald Hanson
COMPANY: Harding Lawson Associates
ADDRESS: 2800 N. 44th St. #506
Phoenix AZ 85008
BILL TO: SAME AS ABOVE to Donald Hanson
COMPANY: _____
ADDRESS: _____

ANALYSIS REQUEST

Chris Colbert
SAMPLERS: (Signature) FAX NUMBER 224-0844 PHONE NUMBER _____

SAMPLE ID	PRES.	TYPE OF CONTAINER	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1 / 418.1 AZ)	BTXE (8021)	Chlorinated Hydrocarbons (601/8021)	Aromatic Hydrocarbons (602/8021)	Organochlorine Pesticides (608/8081)	Chlorinated Herbicides (615/8151)	Organophosphate Pesticides (614/8141)	Semi-Volatile Organics GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	SDWA Primary Standards	SDWA Secondary Standards	SDWA Volatiles (502.1/503.1/502.2)	The 13 Priority Pollutant Metals	The 8 RCRA Metals by TCLP (1311)	NUMBER OF CONTAINERS	
B-2-65	see methanol	Amber	5/24/96	1427	Soil	5047	X	X	X													
B-2-70	see methanol	Amber	5/24/96	1515	Soil	5048	X	X	X													
B-2-75	see methanol	Amber	5/24/96	1625	Soil	5049	X	X	X													
B-2-80	see methanol	Amber	5/24/96	1640	Soil	5050	X	X	X													
B-2-85	see methanol	Amber	5/24/96	1656	Soil	5051	X	X	X													
B-2-90	see methanol	Amber	5/24/96	1725	Soil	5052	X	X	X													
B-2-90ms	see methanol	Amber	5/24/96	1905	Soil	5053	X	X	X													
B-2-90SD	see methanol	Amber	5/24/96	1905	Soil	5054	X	X	X	X	5054											
EW-FB2	see methanol	Amber	5/24/96	1905	Soil	5055	X	X	X													

PROJECT INFORMATION	SAMPLE RECEIPT	RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
PROJECT NO: <u>34529-6.1</u>	TOTAL NO. OF CONTAINERS: <u>10</u> ?	Signature: <u>Chris Colbert</u> Time: <u>1927</u>	Signature: _____ Time: <u>1322</u>	Signature: <u>Chris Colbert</u> Time: <u>1445</u>
PROJECT NAME: <u>Estes</u>	CHAIN OF CUSTODY SEALS: <u>YCS</u>	Printed Name: _____ Date: _____	Printed Name: <u>HLA Storage</u> Date: <u>5/28/96</u>	Printed Name: _____ Date: _____
P.O. NO.: <u>34529-6.1</u>	RECEIVED INTACT: <u>YCS</u>	Company: <u>Harding Lawson Associates</u>	Company: _____	Company: <u>Christian Culbertson 28 MAY 96</u>
SHIPPED VIA: <u>HLA</u>	TEMPERATURE: <u>AMBIENT/COLD</u>	Signature: _____ Time: _____	Signature: _____ Time: _____	Signature: _____ Time: _____
SAMPLE DISPOSAL INSTRUCTIONS*	ICE: <u>PRESENT</u> / ABSENT	RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: 3.
<input checked="" type="checkbox"/> MCKENZIE <input type="checkbox"/> RETURN	<u>SWEE</u> / BLUE	Signature: _____ Time: <u>1927</u>	Signature: <u>Chris Colbert</u> Time: <u>1322</u>	Signature: <u>J. B. K.</u> Time: <u>1445</u>
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS <input type="checkbox"/>		Printed Name: _____ Date: _____	Printed Name: <u>Christian Culbertson</u> Date: <u>5/28/96</u>	Printed Name: _____ Date: _____
TAT: (NORMAL) <input type="checkbox"/> (RUSH) <input type="checkbox"/> 24 <input type="checkbox"/> 48 <input type="checkbox"/> 72 <input type="checkbox"/> 1 WEEK		Company: <u>HLA Storage</u>	Company: <u>Harding Lawson Associates</u>	Company: <u>McKenzie Lab</u>
Comments: <u>The samples were stored in the HLA refrigerator on 5/24/96. A custody seal was placed on the door. The seal was unbroken on 5/28/96 when the were removed by C. Culbertson. Level 4 GC.</u>				

* Samples will be discarded / returned after 60 days. The matrix spike on 15 pipette corresponds to sample B-2-90.



REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

CLIENT: Don P. Hanson
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Lab Number : CL-3160-3
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 1 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED	
PP-6 @ 19, Can #527	Air	P. J. Wilhelmsen	06/27/95 1205	06/28/95	
CONSTITUENT		*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
VOLATILE ORGANICS BY EPA TO-14					
Acetone		50.	ND	ND	1,2
Benzene		10.	2300.	7300.	
Bromodichloromethane		5.	ND	ND	
Bromomethane (Methyl Bromide)		10.	ND	ND	
Bromoform		5.	ND	ND	
1,3-Butadiene		20.	ND	ND	
2-Butanone (MEK)		20.	ND	ND	
Carbon Disulfide		100.	ND	ND	
Carbon Tetrachloride		10.	ND	ND	
Chlorobenzene		5.	15000.	69000.	
Chloroethane (Ethyl Chloride)		10.	610.	1600.	
2-Chloroethyl Vinyl Ether		50.	ND	ND	
Chloroform		20.	ND	ND	
Chloromethane (Methyl Chloride)		10.	100.	200.	
Dibromochloromethane		5.	ND	ND	
1,2-Dibromoethane (EDB)		10.	ND	ND	
1,2-Dichlorobenzene		10.	ND	ND	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2IA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) Concentration in ug/cu M or mg/cu M reported at 760mm Hg pressure and 298 deg. K.
(2) Canister was received under vacuum at -5 in. Hg and pressurized to 20 psig with He.

07/06/95
MS1/1E40P
GD/nagcc (dw)
LF30MS1*A



REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
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CLIENT: Don P. Hanscn
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Lab Number : CL-3160-3
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 2 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
PP-6 @ 19, Can #527.	Air	P. J. Wilhelmsen	06/27/95 1205	06/28/95
CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
1,3-Dichlorobenzene	10.	ND	ND	
1,4-Dichlorobenzene	10.	ND	ND	
1,1-Dichloroethane	5.	320.	1300.	
1,2-Dichloroethane (EDC)	10.	ND	ND	
1,1-Dichloroethene	10.	ND	ND	
cis-1,2-Dichloroethene	10.	60.	240.	
trans-1,2-Dichloroethene	10.	100.	390.	
Dichloromethane	50.	ND	ND	
1,2-Dichloropropane	5.	ND	ND	
cis-1,3-Dichloropropene	5.	ND	ND	
trans-1,3-Dichloropropene	5.	ND	ND	
Ethylbenzene	10.	30.	120.	
2-Hexanone	5.	ND	ND	
4-Methyl-2-Pentanone (MIBK)	5.	ND	ND	
Styrene	10.	ND	ND	
1,1,2,2-Tetrachloroethane	5.	ND	ND	
Tetrachloroethene (PCE)	5.	ND	ND	
Toluene	10.	40.	160.	
1,1,1-Trichloroethane (TCA)	10.	ND	ND	
1,1,2-Trichloroethane	10.	ND	ND	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

07/06/95
MS1/1E40P
GD/nagcc(dw)
LF30MS1*A



REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

CLIENT: Don P. Hanson
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Lab Number : CL-3160-3
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 3 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
PP-6 @ 19, Can #527	Air	P. J. Wilhelmsen	06/27/95 1205	06/28/95
CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
Trichloroethene (TCE)	5.	ND	ND	
Trichlorofluoromethane (F-11)	10.	ND	ND	
Trichlorotrifluoroethane (F-113)	10.	ND	ND	
Vinyl Acetate	20.	ND	ND	
Vinyl Chloride	10.	470.	1000.	
Xylenes (Total)	10.	ND	ND	
Percent Surrogate Recovery			114.	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

07/06/95
MS1/1E40P
GD/nagcc(dw)
LF30MS1*A



REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

CLIENT: Don P. Hanson
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Lab Number : CL-3160-4
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 1 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED	RECEIVED
PP-7 @ 19, Can #8	Air	P. J. Wilhelmsen		06/27/95 1236	06/28/95
CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE	
VOLATILE ORGANICS BY EPA TO-14					
Acetone	50.	ND	ND	1,2	
Benzene	10.	110.	350.		
Bromodichloromethane	5.	ND	ND		
Bromomethane (Methyl Bromide)	10.	ND	ND		
Bromoform	5.	ND	ND		
1,3-Butadiene	20.	ND	ND		
2-Butanone (MEK)	20.	ND	ND		
Carbon Disulfide	100.	ND	ND		
Carbon Tetrachloride	10.	ND	ND		
Chlorobenzene	5.	700.	3200.		
Chloroethane (Ethyl Chloride)	10.	ND	ND		
2-Chloroethyl Vinyl Ether	50.	ND	ND		
Chloroform	20.	ND	ND		
Chloromethane (Methyl Chloride)	10.	ND	ND		
Dibromochloromethane	5.	ND	ND		
1,2-Dibromoethane (EDB)	10.	ND	ND		
1,2-Dichlorobenzene	10.	ND	ND		

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2IA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) Concentration in ug/cu M or mg/cu M reported at 760mm Hg pressure and 298 deg. K.
(2) Canister was received under vacuum at -5 in. Hg and pressurized to 20 psig with He.

07/06/95
MS1/1E41P
GD/nagcc(dw)
LF30MS1*A



REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

CLIENT: Don P. Hanson
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Lab Number : CL-3160-4
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 2 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
PP-7 @ 19, Can #8	Air	P. J. Wilhelmsen	06/27/95 1236	06/28/95
CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
1,3-Dichlorobenzene	10.	ND	ND	
1,4-Dichlorobenzene	10.	ND	ND	
1,1-Dichloroethane	5.	ND	ND	
1,2-Dichloroethane (EDC)	10.	ND	ND	
1,1-Dichloroethene	10.	ND	ND	
cis-1,2-Dichloroethene	10.	ND	ND	
trans-1,2-Dichloroethene	10.	ND	ND	
Dichloromethane	50.	ND	ND	
1,2-Dichloropropane	5.	ND	ND	
cis-1,3-Dichloropropene	5.	ND	ND	
trans-1,3-Dichloropropene	5.	ND	ND	
Ethylbenzene	10.	ND	ND	
2-Hexanone	5.	ND	ND	
4-Methyl-2-Pentanone (MIBK)	5.	ND	ND	
Styrene	10.	ND	ND	
1,1,2,2-Tetrachloroethane	5.	ND	ND	
Tetrachloroethene (PCE)	5.	ND	ND	
Toluene	10.	ND	ND	
1,1,1-Trichloroethane (TCA)	10.	ND	ND	
1,1,2-Trichloroethane	10.	ND	ND	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

07/06/95
MS1/1E41P
GD/nagcc(dw)
LF30MS1*A

REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

CLIENT: Don P. Hanson
Harding Lawson & Associates
2800 N. 44th St., Suite 500
Phoenix, AZ 85008

Lab Number : CL-3160-4
Project : 32034-7.10, Estes
Analyzed : 06/30/95
Analyzed by: EJ
Method : EPA TO-14

REPORT OF ANALYTICAL RESULTS

Page 3 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
PP-7 @ 19, Can #8	Air	P. J. Wilhelmsen	06/27/95 1236	06/28/95

CONSTITUENT	*PQL ppbv	RESULT ppbv	RESULT µg/cu M	NOTE
Trichloroethene (TCE)	5.	ND	ND	
Trichlorofluoromethane (F-11)	10.	ND	ND	
Trichlorotrifluoroethane (F-113)	10.	ND	ND	
Vinyl Acetate	20.	ND	ND	
Vinyl Chloride	10.	150.	320.	
Xylenes (Total)	10.	ND	ND	
Percent Surrogate Recovery			108.	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

07/06/95
MS1/1E41P
GD/nagcc(dw)
LF30MS1*A

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

QC Batch ID: LF30MS1

CLIENT: PACE, Incorporated

Analyzed : 06/30/95
Analyzed by: PS
Method : EPA TO-14

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REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
INSTRUMENT BLANK	Air				
CONSTITUENT	(CAS RN)	*PQL µg/cu M	RESULT µg/cu M	NOTE	
VOLATILE ORGANICS BY EPA TO-14					
Acetone	(67641)	3.	ND	1	
Benzene	(71432)	0.5	ND		
Bromodichloromethane	(75274)	1.	ND		
Bromomethane (Methyl Bromide)	(74839)	1.	ND		
Bromoform	(75252)	1.	ND		
1,3-Butadiene	(106990)	1.	ND		
2-Butanone (MEK)	(78933)	1.	ND		
Carbon Disulfide	(75150)	5.	ND		
Carbon Tetrachloride	(56235)	1.	ND		
Chlorobenzene	(108907)	0.5	ND		
Chloroethane (Ethyl Chloride)	(75003)	0.5	ND		
2-Chloroethyl Vinyl Ether	(110758)	5.	ND		
Chloroform	(67663)	3.	ND		
Chloromethane (Methyl Chloride)	(74873)	0.5	ND		
Dibromochloromethane	(124481)	1.	ND		
1,2-Dibromoethane (EDB)	(106934)	2.	ND		
1,2-Dichlorobenzene	(95501)	1.	ND		
1,3-Dichlorobenzene	(541731)	1.	ND		
1,4-Dichlorobenzene	(106467)	1.	ND		
1,1-Dichloroethane	(75343)	0.5	ND		
1,2-Dichloroethane (EDC)	(107062)	1.	ND		

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit
(1) Concentration in µg/cu M or mg/cu M reported at 760mm Hg pressure and 298 deg. K.

07/06/95
MS1/1E30P
GD/nagcc(dw)

REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

CLIENT: PACE, Incorporated

QC Batch ID: LF30MS1

Analyzed : 06/30/95
Analyzed by: PS
Method : EPA TO-14

INSTRUMENT BLANK
REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
INSTRUMENT BLANK	Air				
CONSTITUENT	(CAS RN)	*PQL µg/cu M	RESULT µg/cu M	NOTE	
1,1-Dichloroethene	(75354)	1.	ND		
cis-1,2-Dichloroethene	(156592)	1.0	ND		
trans-1,2-Dichloroethene	(156605)	1.	ND		
Dichloromethane	(75092)	5.	ND		
1,2-Dichloropropane	(78875)	0.5	ND		
cis-1,3-Dichloropropene	(10061015)	0.5	ND		
trans-1,3-Dichloropropene	(10061026)	0.5	ND		
Ethylbenzene	(100414)	1.	ND		
2-Hexanone	(591786)	0.5	ND		
4-Methyl-2-Pentanone (MIBK)	(108101)	0.5	ND		
Styrene	(100425)	1.	ND		
1,1,2,2-Tetrachloroethane	(79345)	1.	ND		
Tetrachloroethene (PCE)	(127184)	1.	ND		
Toluene	(108883)	1	ND		
1,1,1-Trichloroethane (TCA)	(71556)	1.	ND		
1,1,2-Trichloroethane	(79005)	1.	ND		
Trichloroethene (TCE)	(79016)	0.5	ND		
Trichlorofluoromethane (F-11)	(75694)	1.	ND		
Trichlorotrifluoroethane (F-113)	(76131)	2.	ND		
Vinyl Acetate	(108054)	2.	ND		
Vinyl Chloride	(75014)	0.5	ND		
Xylenes (Total)	(1330207)	1.	ND		

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

07/06/95
MS1/1E30P
GD/nagcc(dw)

REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

CLIENT: PACE, Incorporated

QC Batch ID: LF30MS1

Analyzed : 06/30/95
Analyzed by: PS
Method : EPA TO-14

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
QC SPIKE	Air				
CONSTITUENT	*PQL µg/cu M	SPIKE AMOUNT	RESULT µg/cu M	%REC	NOTE
VOLATILE ORGANICS BY EPA TO-14					
Acetone	3.		NS		1,2
Benzene	0.5	16.	18.	113.	
Bromodichloromethane	1.		NS		
Bromomethane (Methyl Bromide)	1.	21.	16.	76.	
Bromoform	1.		NS		
1,3-Butadiene	1.	10.	8.8	88.	
2-Butanone (MEK)	1.		NS		
Carbon Disulfide	5.		NS		
Carbon Tetrachloride	1.	31.	38.	123.	
Chlorobenzene	0.5	23.	23.	100.	
Chloroethane (Ethyl Chloride)	0.5		NS		
2-Chloroethyl Vinyl Ether	5.		NS		
Chloroform	3.	25.	30.	120.	
Chloromethane (Methyl Chloride)	0.5		NS		
Dibromochloromethane	1.		NS		
1,2-Dibromoethane (EDB)	2.	10.	8.3	83.	
1,2-Dichlorobenzene	1.		NS		
1,3-Dichlorobenzene	1.		NS		
1,4-Dichlorobenzene	1.		NS		
1,1-Dichloroethane	0.5		NS		

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187

- * RESULTS listed as 'NS' were not spiked. PQL = Practical Quantitation Limit
(1) Concentration in ug/cu M or mg/cu M reported at 760mm Hg pressure and 298 deg. K.
(2) Zero Air spiked with NIST SRM 1804, Cylinder # ALM-000881.

07/06/95
MS1/1E31P
GD/nagcc(dw)

REPORT OF LABORATORY ANALYSIS

Southern California Laboratory
4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353
FAX (805) 389-1438

QC Batch ID: LF30MS1

CLIENT: PACE, Incorporated

Analyzed : 06/30/95
Analyzed by: PS
Method : EPA TO-14

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
QC SPIKE	Air				
CONSTITUENT	*PQL µg/cu M	SPIKE AMOUNT	RESULT µg/cu M	%REC	NOTE
1,2-Dichloroethane (EDC)	1.	20.	19.	95.	
1,1-Dichloroethene	1.		NS		
cis-1,2-Dichloroethene	1.0		NS		
trans-1,2-Dichloroethene	1.		NS		
Dichloromethane	5.	17.	19.	112.	
1,2-Dichloropropane	0.5	23.	26.	113.	
cis-1,3-Dichloropropene	0.5		NS		
trans-1,3-Dichloropropene	0.5		NS		
Ethylbenzene	1.	15.	15.	100.	
2-Hexanone	0.5		NS		
4-Methyl-2-Pentanone (MIBK)	0.5		NS		
Styrene	1.		NS		
1,1,2,2-Tetrachloroethane	1.		NS		
Tetrachloroethene (PCE)	1.	34.	36.	106.	
Toluene	1	18.	18.	100.	
1,1,1-Trichloroethane (TCA)	1.	28.	34.	121.	
1,1,2-Trichloroethane	1.		NS		
Trichloroethene (TCE)	0.5	27.	28.	104.	
Trichlorofluoromethane (F-11)	1.	29.	31.	107.	
Trichlorotrifluoroethane (F-113)	2.		NS		
Vinyl Acetate	2.		NS		
Vinyl Chloride	0.5	14.	12.	86.	
Xylenes (Total)	1.	15.	16.	107.	

Lab Certifications: CAELAP #1598; UTELAP #E-142; AZELAP #AZ0162; A2LA #0136-01; L.A.Co.CSD #10187
* RESULTS listed as 'NS' were not spiked. PQL = Practical Quantitation Limit

07/06/95
MS1/1E31P
GD/nagcc(dw)



Harding Lawson Associates
2800 N. 44th St #500
Phoenix, Arizona 85008
(602) 224-0844 • FAX (602) 224-5133

CHAIN OF CUSTODY FORM

Lab: FACE, Inc.

Job Number: 32034-7.10

Name/Location: ESTES

Project Manager: Don P. Hanson

Samplers: T.S. WILHELMSEN

Recorder: [Signature]
(Signature Required)

SOURCE CODE	MATRIX					# CONTAINERS & PRESERV.					SAMPLE NUMBER OR LAB NUMBER			DATE				STATION DESCRIPTION/NOTES
	Water	Sediment	Soil	Oil	AIR	Unpres.	H ₂ SQ	HNO ₃	HCL	Ice	Yr	Wk	Seq	Yr	Mo	Day	Time	
62					X	1							FD-19506270953					FACE CAN # 11
62					X	1							PP-4@199506271123					FACE CAN # 13
62					X	1							PP-6@199506271205					FACE CAN # 527
62					X	1							PP-7@199506271236					FACE CAN # 8

ANALYSIS REQUESTED														
EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	METALS	EPA 8015M/TPHg	EPA 8020/BTEX	EPA 8015M/TPHd.o	ADHS BLS-181	EPA TO - 14					

LAB NUMBER			DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
Yr	Wk	Seq				

CHAIN OF CUSTODY RECORD			
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME	
<u>[Signature]</u>			
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME	
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME	
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME	
DISPATCHED BY: (Signature)	DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
<u>[Signature]</u>	<u>6-27-95 1700</u>	<u>[Signature]</u>	<u>6-28-95 1030</u>
METHOD OF SHIPMENT			
<u>FED EX #6426175873</u>			
SAMPLE CONDITION WHEN RECEIVED BY THE LABORATORY			
Received cold: Y/N		Received Intact: Y/N	

Harding Lawson Associates
Attn: Don Hanson
2800 N. 44th Street, #500
Phoenix, AZ 85008

Date Sampled: 21 May 96
Date Received: 22 May 96
Date Extracted: 21 May 96
Date Analyzed: 02 Jun 96
Date Reported: 13 Jun 96
McKenzie I.D.: E96-4862
Units Reported: µg/Kg (ppb)
Job No.: 34529-6.1
Project Name: Estes LF.
Sample Weight: 26.2 g

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>B-1-72.0</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	<50	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	<200	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50
Surrogate Recovery (%)		
1-Chloro-4-fluorobenzene (PID)	96	
1-Chloro-4-fluorobenzene (ELCD)	91	

MRL = Minimum Reporting Limit

Maja Gradnick for Tracey Hockett
Tracey L. Hockett, Organic Laboratory Supervisor

Harding Lawson Associates
 Attn: Don Hanson
 2800 N. 44th Street. #500
 Phoenix, AZ 85008

Date Sampled: 21 May 96
 Date Received: 22 May 96
 Date Analyzed: 03 Jun 96
 Date Reported: 13 Jun 96
 McKenzie I.D.: E96-4863
 Units Reported: µg/L (ppb)
 Job No.: 34529-6.1
 Project Name: Estes LF.

Aromatic and Halogenated Volatile Hydrocarbons
by EPA 8021

<u>Compound</u>	<u>EW-FB1</u>	<u>MRL</u>
Benzene	<50	50
Bromodichloromethane	<50	50
Bromoform	<50	50
Bromomethane	<50	50
Carbon tetrachloride	<50	50
Chlorobenzene	<50	50
Chloroethane	<50	50
Chloroform	<50	50
Chloromethane	<50	50
Dibromochloromethane	<50	50
1,2-Dichlorobenzene	<50	50
1,3-Dichlorobenzene	<50	50
1,4-Dichlorobenzene	<50	50
Dichlorodifluoromethane	<50	50
1,1-Dichloroethane	<50	50
1,2-Dichloroethane	<50	50
1,1-Dichloroethene	<50	50
cis-1,2-Dichloroethene	<50	50
trans-1,2-Dichloroethene	<50	50
1,2-Dichloropropane	<50	50
cis-1,3-Dichloropropene	<50	50
trans-1,3-Dichloropropene	<50	50
Ethylbenzene	<50	50
Methylene chloride	<200	200
1,1,2,2-Tetrachloroethane	<50	50
Tetrachloroethene	<50	50
Toluene	<50	50
1,1,1-Trichloroethane	<50	50
1,1,2-Trichloroethane	<50	50
Trichloroethene	<50	50
Trichlorofluoromethane	<50	50
Vinyl chloride	<50	50
m,p-Xylene	<100	100
o-Xylene	<50	50

Surrogate Recovery (%)
 1-Chloro-4-fluorobenzene (PID) 98
 1-Chloro-4-fluorobenzene (ELCD) 96

MRL = Minimum Reporting Limit

Maja Chadwick for Tracey Hockett
 Tracey L. Hockett, Organic Laboratory Supervisor

Chain of Custody

DATE 5/28/96 PAGE 2 of 2

PROJECT MANAGER: Donald Hanson

COMPANY: Harding Lawson Associates

ADDRESS: 2800 N. 44th St. #500
Phoenix AZ 85008

BILL TO: Don Hanson

COMPANY: HLA

ADDRESS: Same as above

SAMPLERS: (Signature) Ch. Seiff FAX NUMBER 224-0844 PHONE NUMBER

SAMPLE ID	PRES. CONTAINER	DATE	TIME	MATRIX	LAB ID
EW-TBZ	Tie Ambr	5/28/96	-		5056

ANALYSIS REQUEST

RELINQUISHED BY:	RELINQUISHED BY:	RELINQUISHED BY:	RELINQUISHED BY:
Signature:	Signature:	Signature:	Signature:
Printed Name:	Printed Name:	Printed Name:	Printed Name:
Date:	Date:	Date:	Date:
Company:	Company:	Company:	Company:
<u>Ch. Seiff</u>	<u>Ch. Seiff</u>	<u>Ch. Seiff</u>	<u>Ch. Seiff</u>
<u>Harding Lawson Associates</u>	<u>HLA Storage</u>	<u>HLA</u>	<u>HLA</u>
<u>5/24/96</u>	<u>5/28/96</u>	<u>5/28/96</u>	<u>5/28/96</u>
<u>HLA Storage</u>	<u>HLA Storage</u>	<u>HLA</u>	<u>HLA</u>
<u>Harding Lawson Associates</u>	<u>Harding Lawson Associates</u>	<u>Harding Lawson Associates</u>	<u>Harding Lawson Associates</u>

PROJECT INFORMATION

PROJECT NO: 34529-6.1

PROJECT NAME: Fstss

P.O. NO.: 34529-6.1

SHIPPED VIA: HLA

SAMPLE DISPOSAL INSTRUCTIONS:

McKENZIE RETURN

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

TAT: (NORMAL) (RUSH) 24 48 72 1 WEEK

Comments: The samples were stored in the HLA refrigerator on 5/24/96. No study was planned for them. The seal was unbroken 5/28/96 when they were removed by C. Seiffert. Level 4 GC

PROJECT INFORMATION

PROJECT NO: 34529-6.1

CHAIN OF CUSTODY SEALS: Yes

RECEIVED INTACT: Yes

TEMPERATURE: AMBIENT / COLD

ICE: PRESENT / ABSENT

BLUE

TOTAL NO. OF CONTAINERS: 10

RECEIVED BY: 1. Ch. Seiff Time: 1927
Date: 5/24/96
Company: Harding Lawson Associates

RECEIVED BY: 2. Ch. Seiff Time: 1322
Date: 5/28/96
Company: HLA Storage

RECEIVED BY: 3. Ch. Seiff Time: 1445
Date: 5/28/96
Company: HLA

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.11
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4864s 11
 Acquired : Jun 03, 1996 01:33:01
 Printed : Jun 03, 1996 11:10:58

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.11	4975	0.0	0	0.00	
6.49	3139	0.0	0	0.00	
6.68	3093	3.4	68 NC	0.68	Vinyl Chloride
11.95	5188	0.0	0	0.00	
24.60	5169	3.6	73 NC	0.73	Cis 1,2-dce
31.66	1023659	5.0	100	1.00	Flbenzene (IS)
39.70	2178	2.3	46 LMR	0.46	Toluene
45.62	351691	452.8	9057	90.57	1cl4fbz (surr) 91.1
46.16	2919	2.5	51 NC	0.51	Chlorobenzene
46.73	3434	3.1	61 LMR	0.61	M/P Xylene
47.19	1020766	5.0	100	1.00	1cl2flbz (IS)
49.12	5502	0.0	0	0.00	
52.53	3353	3.1	62 LMR	0.62	1,3,5-tmb/2-cl tol
54.17	3377	2.0	39	0.39	1,2,4-tmb
56.36	7639	1.7	34	0.34	1,4-dcb
57.26	2053	2.5	50 CMALBY	0.50	n-butylbenzene
57.90	4513	1.5	29 LMR	0.29	1,2-dcb
65.75	3087	2.6	52 NM	0.52	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.11
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4864s 11
 Acquired : Jun 03, 1996 01:33:01
 Printed : Jun 03, 1996 11:10:58

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.14	331	0.0	0	0.00	
5.69	1467	5.1	101	1.01	DCDFM
11.73	587	0.0	0	0.00	
11.95	210	0.0	0	0.00	
12.30	369	0.0	0	0.00	
12.76	1832	0.0	0	0.00	
13.01	309	0.0	0	0.00	
13.28	541	0.0	0	0.00	
13.70	722	0.0	0	0.00	
15.03	91993	1.0	20	0.20	METH CHLORIDE
19.03	694	0.0	0	0.00	
19.17	1009	0.0	0	0.00	
24.69	5384	3.8	76	0.76	CIS 1,2-DCE
28.36	457	0.0	0	0.00	
28.99	498	2.8	56	0.56	1,1-DCPE
31.72	11384	0.0	0	0.00	
32.19	1786	12.4	249	2.49	2-CL ETH VI ETH
33.44	697	0.0	0	0.00	
33.82	942	0.0	0	0.00	
38.49	743	2.3	45	0.45	CIS 1,3-DCPE
40.98	757	0.0	0	0.00	
41.99	596	0.0	0	0.00	
42.13	909	0.0	0	0.00	
42.61	1465	6.5	130	1.30	1,3 DCPA/PCE - NC
43.62	430	4.1	82	0.82	DIBRCLMETHANE
45.67	327500	551.3	11026	110.26	1CL4FBZ (SURR) 110. /
46.70	1203	0.0	0	0.00	
47.26	634557	5.0	100	1.00	1CL2FBZ (IS)
48.30	3625	0.0	0	0.00	
48.90	942	0.0	0	0.00	
52.50	330	4.1	83	0.83	2-CL TOLUENE
54.83	402	0.0	0	0.00	
55.39	546	0.0	0	0.00	
55.97	819	5.3	107	1.07	1,3-DCB
58.04	1657	6.0	121	1.21	1,2-DCB
58.52	302	0.0	0	0.00	
59.23	420	0.0	0	0.00	
60.21	381	0.0	0	0.00	
61.36	232	14.2	284	2.84	1,2-DBr-3-CPA
63.53	730	0.0	0	0.00	
63.91	395	0.0	0	0.00	
64.25	680	8.0	160	1.60	1,2,4-TCB
64.71	5101	6.4	128	1.28	HEXACLBUTADIENE
65.90	4601	11.0	220	2.20	1,2,3-TCB
66.48	1519	0.0	0	0.00	

Continued...

Volatiles Instrument 1 Run Log

CTL STD
CHK STD
Mix Spk
INT STD
EXT SURR

VOAP 0523-1 10 ug/ml
VDAS 0523-1
CTL STD
IS 0523-04 40ug/ml
EQU 0523-03 20 ug/ml

Analyst TDF/UM

Printed CT

Onto Network _____

Method Used IVDAS27.MC

Batch Used 2402-1

Page 030

Date 02 JUN 96

Date 03 JUN 96

Date _____

* (E) UM 02 Jun 96 CT 03 Jun 96

Data File Number	SP#	Sample ID	Aliquot	Client ID	Method	Comments	Hnu	pH
16060201	1	CTL VOA	5.2ul		+11	✓ 4/11, JUN 96		
16060202	2	MTHD BIK	5.0ul		↓	29 MAY 96 ✓		
03	3	50205	↓		8010/8020	RQ x1 cont. TCE due to carryover TCE 2000 ppm x 40	0	0
04	4	50215 x 5000	1.0ul		↓	dil 1:100, total vol = x 5000	150	150
05	5	50225 x 50	↓	see	↓	✓	5	5
06	6	50235	50ul	(ext log)	↓	✓	6	0
5020-3 641	07	BLK SPK 5	50.0ul		A11	29 MAY 96 ✓		
	08	BLK SPK DUPS	↓		↓	↓ ✓		
	09	48625	50.0ul		8010/8020	29 MAY 96 METH ✓ 4/13 JUN 96	0.5	0.5
	10	48635				✓		
	11	48645		see		✓	0	0
5020-68 (-)	12	48655 MSD		(ext log)		✓		
	13	48665 MS				✓		
	14	48675				✓	0.5	0.5
	15	48685	↓		↓	↓	0	0*
	16	CHK VOA	5.0ul		A11	✓ 4/11 JUN 96		

INTERNAL STANDARD WORKSHEET

METHOD: All Volatiles
 DATE: 27 May 96

INSTRUMENT: 1
 OPERATOR: UI/CT/MLM/TDF

STANDARD CONC. (ppb)	PID DETECTOR FLUOROBENZENE	PID DETECTOR 1-CHLORO-2-FLUOROBENZENE	HALL (ELCD) DETECTOR 1-CHLORO-2-FLUOROBENZENE
	RESPONSE AREA	RESPONSE AREA	RESPONSE AREA
<u>0.4</u>	<u>1062336</u>	<u>1039170</u>	<u>773186</u>
<u>0.5</u>	<u>1050155</u>	<u>1032046</u>	<u>848689</u>
<u>1.0</u>	<u>1107814</u>	<u>1091063</u>	<u>890777</u>
<u>5.0</u>	<u>1087288</u>	<u>1078086</u>	<u>873477</u>
<u>10.0</u>	<u>1136074</u>	<u>1142026</u>	<u>981342</u>
<u>25.0</u>	<u>1083021</u>	<u>1122392</u>	<u>896191</u>
<u>50.0</u>	<u>1079972</u>	<u>1181182</u>	<u>954382</u>
MEAN	<u>1086666</u>	<u>1097995</u>	<u>888292</u>
UPPER LIMIT (130%)	<u>1412666</u>	<u>1427394</u>	<u>1154780</u>
LOWER LIMIT (70%)	<u>760666</u>	<u>768597</u>	<u>621804</u>

Comments:

Initials TDF Date 30 May 96

File : c:\ezchrom\chrom\160602.11
Method : c:\ezchrom\chrom\1voa0527.met
Sample ID : 4864s 11
Acquired : Jun 03, 1996 01:33:01
Printed : Jun 03, 1996 11:10:58

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
66.90	329	0.0	0	0.00	

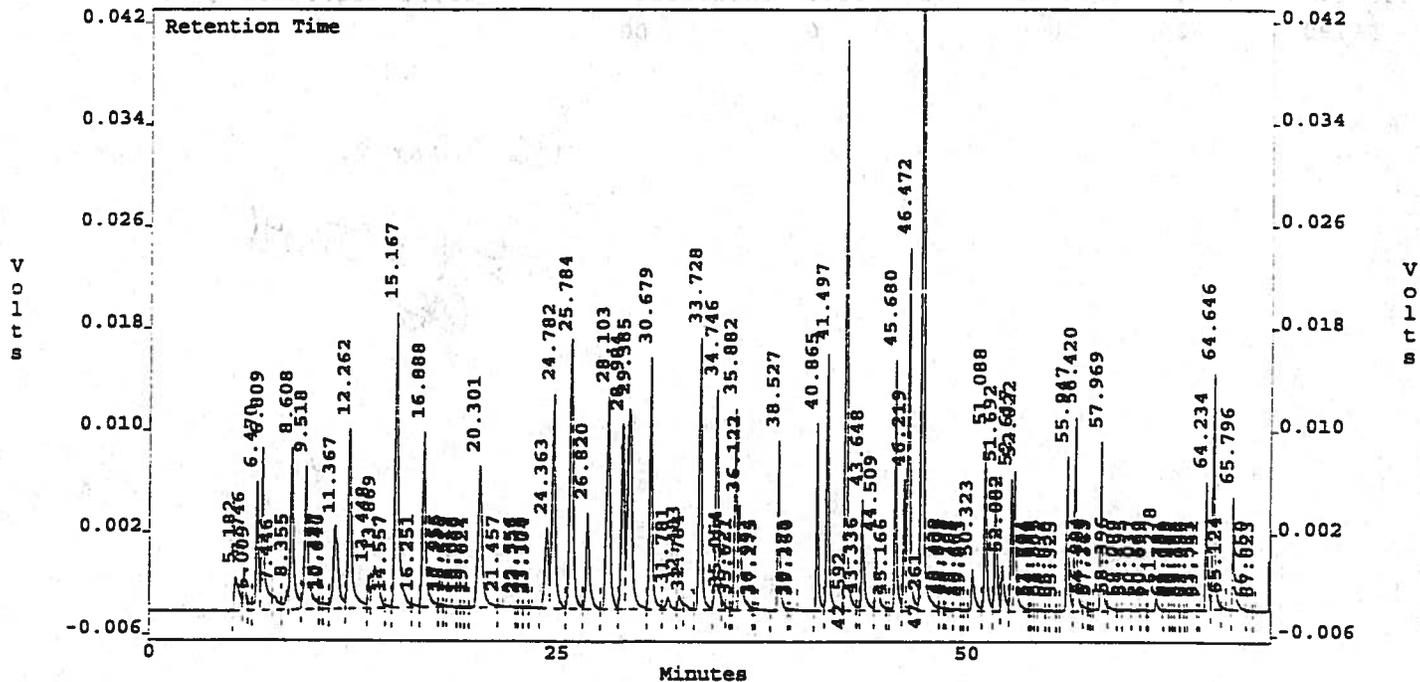
01 11 Jun 96

HEN 13 Jun 96
EB

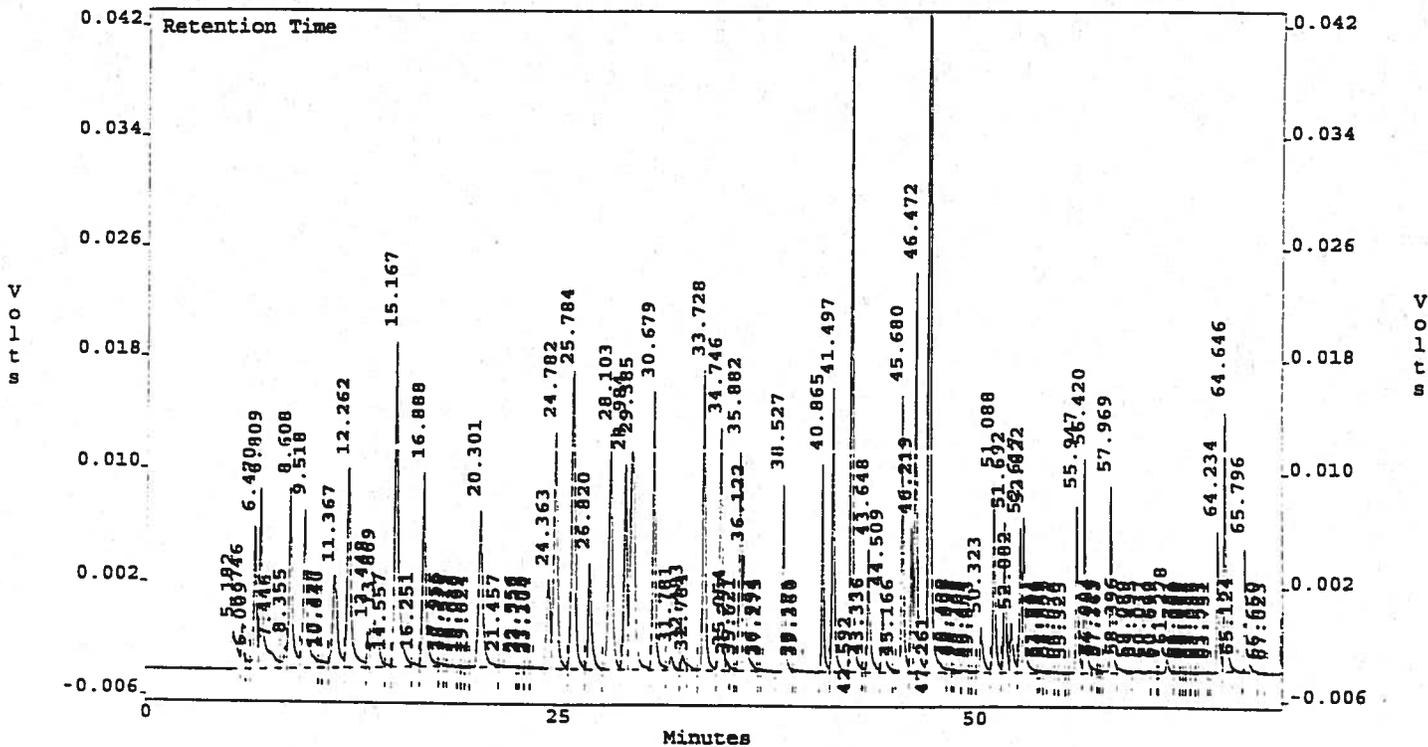
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.12
Method : c:\ezchrom\chrom\1voa0527.met
Sample ID : 4865s 12 9D AE 13 Jun 96
Acquired : Jun 03, 1996 03:05:11
Printed : Jun 03, 1996 11:11:16

c:\ezchrom\chrom\160602.12 -- Channel B



c:\ezchrom\chrom\160602.12 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.12
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4865s & 12 SD **AE 13 JUN 96**
 Acquired : Jun 03, 1996 03:05:11
 Printed : Jun 03, 1996 11:11:19

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
5.11	37895	0.0	0	0.00	
5.58	2679	0.0	0	0.00	
6.16	5537	0.0	0	0.00	
6.55	4829	0.0	0	0.00	
6.74	17242	22.7	454	4.54	Vinyl Chloride
12.19	43800	22.4	447	4.47	1,1-dce
16.14	34289	21.5	430	4.30	Mtbe
16.78	84921	22.4	447	4.47	Trans 1,2-dce
24.21	3811	0.0	0	0.00	
24.71	81986	23.2	464	4.64	Cis 1,2-dce
28.92	62197	23.1	461	4.61	1,1-dcpe
30.45	162272	21.6	342 ✓432	4.32	Benzene
31.72	1018585	5.0	100	1.00	Flbenzene (IS)
33.66	94822	22.8	456	4.56	Tce
38.47	28386	19.5	389	3.89	Cis 1,3-dcpe
39.10	13237	0.0	0	0.00	
39.74	157409	22.0	349 ✓440	4.40	Toluene
40.80	35279	18.1	363	3.63	Trans 1,3-dcpe
42.52	75452	21.6	342 ✓431	4.31	Pce
45.62	165690	226.5	4530	45.30	1cl4fbz (surr) 91.1
46.17	163483	22.1	441	4.41	Chlorobenzene
46.42	146836	21.8	436	4.36	Ethylbenzene
46.74	334441	44.1	883	8.83	M/P Xylene
47.19	1010312	5.0	100	1.00	1cl2flbz (IS)
48.59	137282	22.3	445	4.45	O Xylene
48.79	178226	21.3	425	4.25	Styrene
49.10	5310	0.0	0	0.00	
50.13	117704	22.2	443	4.43	Isopropylbenzene
51.84	126232	22.0	439	4.39	n-propylbenzene
51.98	175726	22.2	443	4.43	Bromobenzene
52.53	340188	44.0	880	8.80	1,3,5-tmb/2-cl tol
52.77	161308	22.1	441	4.41	4-cl toluene
54.01	99547	22.0	440	4.40	t-butylbenzene
54.17	152178	21.8	436	4.36	1,2,4-tmb
54.90	109992	21.8	436	4.36	s-butylbenzene
55.51	109690	21.5	431	4.31	p-isopropyltoluene
55.87	133768	20.6	411	4.11	1,3-dcb
56.35	134218	20.6	413	4.13	1,4-dcb
57.26	112423	20.9	417	4.17	n-butylbenzene
57.90	112763	21.2	336 ✓423	4.23	1,2-dcb
64.17	58090	19.8	395	3.95	1,2,4-tcb
64.59	42670	19.3	386	3.86	Hexachlorobutadiene
65.00	75600	17.4	348	3.48	Napthalene
65.74	53765	19.4	389	3.89	1,2,3-tcb
66.20	2384	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.12
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4865s 12 SD
 Acquired : Jun 03, 1996 03:05:11
 Printed : Jun 03, 1996 11:11:19

AE 13 Jun 96

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.18	54026	0.0	0	0.00	
5.75	34034	9.6	193	1.93	DCDFM
6.01	8091	0.0	0	0.00	
6.47	107159	14.7	294	2.94	CHLOROMETHANE
6.81	160919	14.7	295	2.95	VINYL CHLORIDE
7.45	27193	0.0	0	0.00	
8.35	21185	12.3	247	2.47	BROMOMETHANE
8.61	177177	19.0	380	3.80	CHLOROETHANE
9.52	189142	15.0	300	3.00	TCFM
10.43	6860	0.0	0	0.00	
10.64	8919	0.0	0	0.00	
11.37	147840	18.3	365	3.65	FREON 113
12.26	231208	19.4	✓ 389	3.89	1,1-DCE
13.45	21166	0.0	0	0.00	
13.87	91521	0.0	0	0.00	
14.56	3569	0.0	0	0.00	
15.17	363996	16.6	332	3.32	METH CHLORIDE
16.25	4955	0.0	0	0.00	
16.89	204933	19.5	390	3.90	TRANS 1,2-DCE
17.95	3587	0.0	0	0.00	
18.14	1119	0.0	0	0.00	
18.52	946	0.0	0	0.00	
19.04	955	0.0	0	0.00	
19.27	815	0.0	0	0.00	
19.62	895	0.0	0	0.00	
20.30	199700	20.1	402	4.02	1,1-DCA
21.46	1710	0.0	0	0.00	
22.56	320	0.0	0	0.00	
22.73	414	0.0	0	0.00	
23.17	1103	0.0	0	0.00	
23.30	474	0.0	0	0.00	
24.36	105304	17.2	344	3.44	2,2-DCPA
24.78	240832	21.0	420	4.20	CIS 1,2-DCE
25.78	320554	22.8	455	4.55	CHLOROFORM
26.82	115519	17.7	353	3.53	BCM
28.10	261770	22.2	✓ 444	4.44	1,1,1-TCA
28.98	177674	22.5	450	4.50	1,1-DCPE
29.38	308288	31.5	630	6.30	CARBON TET
30.68	224686	21.8	437	4.37	1,2-DCA
31.78	18104	0.0	0	0.00	
32.48	16757	19.3	386	3.86	2-CL ETH VI ETH
32.78	8348	0.0	0	0.00	
33.73	251312	21.1	✓ 421	4.21	TCE
34.75	198591	21.2	424	4.24	1,2-DCPA
35.05	6842	0.0	0	0.00	

Continued...

file : c:\ezchrom\chrom\160602.10
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4863s 10
 Acquired : Jun 03, 1996 00:05:41
 Printed : Jun 03, 1996 11:10:44

Channel B Results

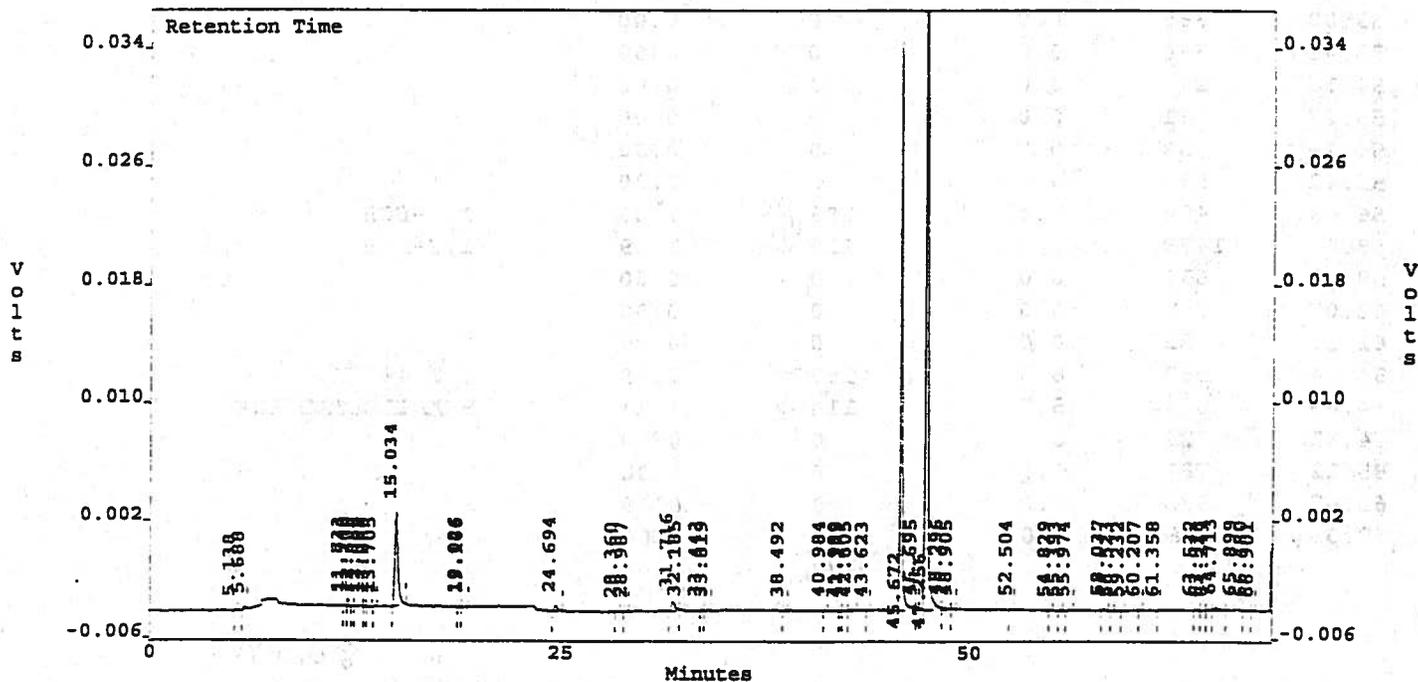
RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
53.00	665	0.0	0	0.00	
53.46	598	0.0	0	0.00	
54.16	275	0.0	0	0.00	
55.07	961	0.0	0	0.00	
55.24	336	0.0	0	0.00	
55.42	571	0.0	0	0.00	
56.03	1454	5.4	108	1.08	1,3-DCB
58.01	1479	6.0	119	1.19	1,2-DCB
58.71	631	0.0	0	0.00	
62.07	545	0.0	0	0.00	
62.52	322	0.0	0	0.00	
64.34	562	8.0	159	1.59	1,2,4-TCB
64.69	1084	5.7	114	1.14	HEXACHLOROCYCLOHEPTADIENE
64.81	722	0.0	0	0.00	
65.12	781	0.0	0	0.00	
65.47	875	0.0	0	0.00	
67.03	259	0.0	0	0.00	

UI 11 Jun 96
 AB 13 Jun 96

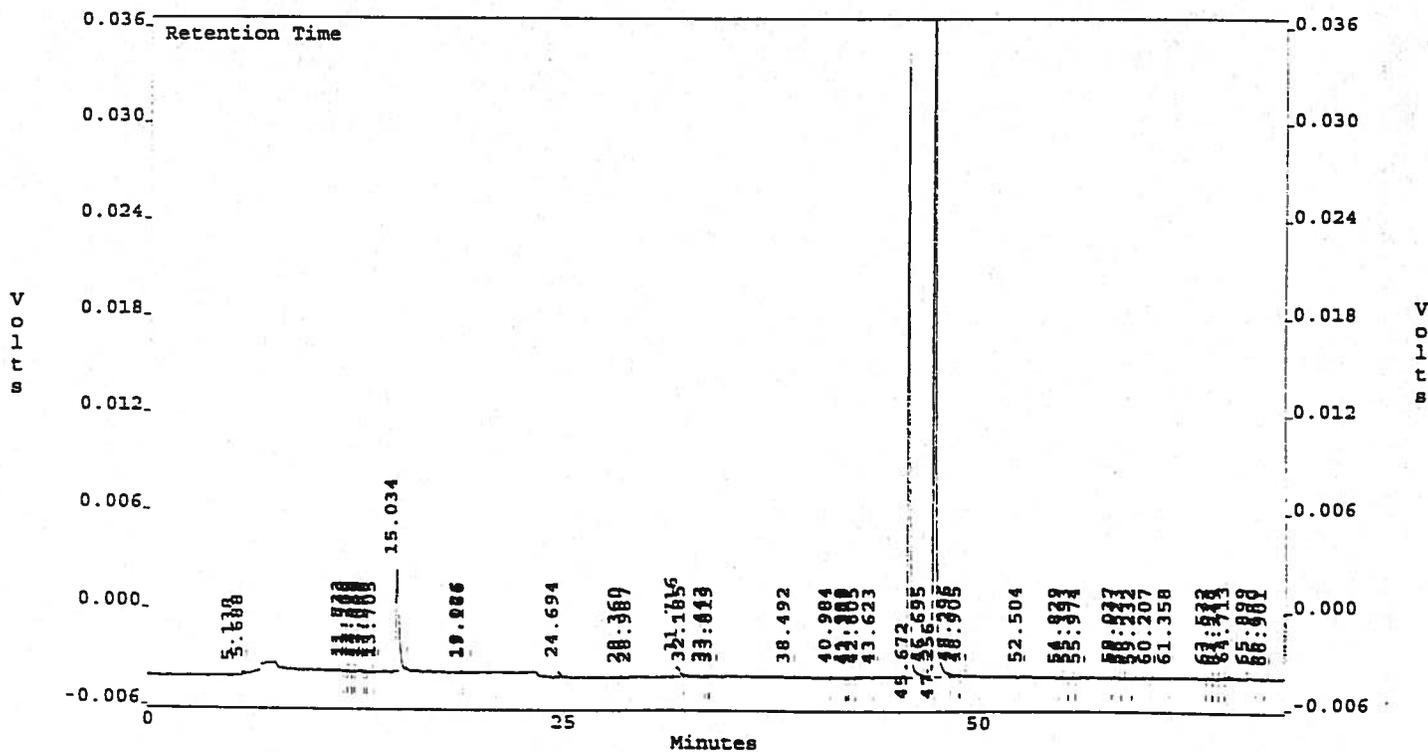
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.11
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4864s 11
 Acquired : Jun 03, 1996 01:33:01
 Printed : Jun 03, 1996 11:10:56

c:\ezchrom\chrom\160602.11 -- Channel B



c:\ezchrom\chrom\160602.11 -- Channel B



Date: 23 MAY 96 Chemist: MLM Page 1 of 1

Surrogate name: <u>8021 BTEX</u> <u>ESS 0419-6</u>	<u>9010/8020 MeOH</u> <u>ESS 0419-6</u>	Spike name: <u>VOAS 0405-11</u> / <u>VOAS 0405-10</u>
Surrogate ID: <u>↓</u>	<u>↓</u>	Spike ID: <u>↓</u> / <u>↓</u>
Concentration: <u>400 µg/ml</u>	<u>400 µg/ml</u>	Concentration: <u>10.0 µg/ml</u> / <u>10.0 µg/ml</u>
Date Expires: <u>19 OCT 96</u>	<u>19 OCT 96</u>	Date Expires: <u>23 MAY 96</u> / <u>23 MAY 96</u>
Amount added: <u>50.0 µl</u>	<u>100 µl</u>	Amount added: <u>1.0 ml</u> / <u>1.0 ml</u>

Extraction solvent: MeOH Solvent lot: 35285

General Comments: 10.0 min Sonication in ice-bath
VOAS 0405-11 was added to 4865 MS
VOAS 0405-10 was added to 4864 MS + 4866 MSD

Extraction started: 1600 Brinkman Calibration 10.0 mL by volumetric flask.
firmness * (E) MLM 23 MAY 96

Sample ID	Init Mass (g)	Final Vol (mL)	Client ID	Comments	Dil.	Hnu
MTHD BLK	10.0	10.0	NA	BAKED SAND	x1	
BLK SPK	10.0		↓	↓		
ALL SPRDOP	10.0		↓	↓		
4844	10.0		38-02939	8021 BTEX ↓ glass jar dirt		1
4845	10.0	↓	BB-02940	↓ glass jar ↓		1
4862	92.8	119.0/20.0	B1-72.0	9010/8020 MeOH lot: 5156010 serial: 226410		0.5
4863	92.7	92.9/93.4	EW-FB1	lot: 5156010 serial: 226419		
4864	93.1	119.7/	B-1-80T	lot: 5156010 serial: 226330		0
4865 MSD	93.3	119.8/	MS-10	* serial: lot: 5156010 serial: 226363		
4866 MS	93.0	118.8/	MS-1	lot: 5156010 serial: 226342		
4867	92.7	118.3/	B-1-92B	lot: 5156010 serial: 226329		0.5
4868	93.0	93.5/	EW-TB1 TRIP BLANK	lot: 5156010 serial: 226722		0
4844 S	10.0	10.0	BB-02939			
4844 SD	10.0	↓	↓			
MLM 23 MAY 96						

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 28, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
36.39	238	0.0	0	0.00	
36.50	268	0.0	0	0.00	
37.15	859	0.0	0	0.00	
37.41	240	0.0	0	0.00	
37.75	1593	0.0	0	0.00	
37.93	897	0.0	0	0.00	
38.49	10936	2.5	50	0.50	CIS 1,3-DCPE
38.88	558	0.0	0	0.00	
39.29	2950	0.0	0	0.00	
39.42	1508	0.0	0	0.00	
39.67	887	0.0	0	0.00	
39.82	1050	0.0	0	0.00	
40.28	2059	0.0	0	0.00	
40.48	2393	0.0	0	0.00	
40.84	10315	2.5	50	0.50	TRANS 1,3-DCPE
41.45	13293	2.5	50	0.50	1,1,2-TCA 0.01566 a.r. 03JUN96 UT
41.84	2432	0.0	0	0.00	
42.55	43168	5.0	100	1.00	1,3 DCPA/PCE
42.87	5531	0.0	0	0.00	
43.16	1577	0.0	0	0.00	
43.59	3095	2.5	50	0.50	DIBROMMETHANE 0.00365 a.r. 03JUN96 UT
43.76	2275	0.0	0	0.00	
44.04	3241	0.0	0	0.00	
44.46	4849	2.5	50	0.50	1,2-DBEA (EDB)
45.11	4073	0.0	0	0.00	
45.65	13928	25.0	500	5.00	1,1,1,2-PCPA (SURRE)
46.20	7580	2.5	50	0.50	CHLOROBENZENE 0.0089 a.r. 03JUN96 UT
46.41	13331	2.5	50	0.50	1,1,1,2-PCPA 0.0216 a.r. 03JUN96
47.21	948689	5.0	100	1.00	1,1,2,2-PCPA (IS)
47.98	4815	0.0	0	0.00	
48.23	4832	0.0	0	0.00	
48.65	3744	0.0	0	0.00	
48.92	914	0.0	0	0.00	
49.04	827	0.0	0	0.00	
49.34	5366	0.0	0	0.00	
49.68	1172	0.0	0	0.00	
49.97	1479	0.0	0	0.00	
50.31	2499	2.5	50	0.50	BROMCFORM 0.00274 a.r. 03JUN96
50.58	4658	0.0	0	0.00	
51.03	11996	2.5	50	0.50	1,1,2,2-PCPA 0.0140 a.r. 03JUN96
51.66	12330	2.5	50	0.50	1,2,3-TCPA 0.0145 a.r. 03JUN96
52.01	2229	2.5	50	0.50	BROMCBENZENE
52.21	1342	0.0	0	0.00	
52.58	6197	2.5	50	0.50	2-CL TOLUENE
52.78	3962	2.5	50	0.50	4-CL TOLUENE
53.22	1336	0.0	0	0.00	
53.41	4768	0.0	0	0.00	
53.56	1575	0.0	0	0.00	
54.12	1514	0.0	0	0.00	
54.48	1079	0.0	0	0.00	
54.68	391	0.0	0	0.00	
54.91	2635	0.0	0	0.00	
55.14	378	0.0	0	0.00	

Completed...

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 28, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
55.29	1607	0.0	0	0.00	
55.67	1345	0.0	0	0.00	
55.89	10883	2.5	50	0.50	1,3-DCB 0.0128 a.r. 03 JUN 96 U
56.38	13123	2.5	50	0.50	1,4-DCB 0.0155 a.r. 03 JUN 96 U
57.17	2753	0.0	0	0.00	
57.26	1454	0.0	0	0.00	
57.62	2693	0.0	0	0.00	
57.93	10345	2.5	50	0.50	1,2-DCB 0.0122 a.r. 03 JUN 96 U
58.33	2273	0.0	0	0.00	
58.68	1443	0.0	0	0.00	
58.82	2561	0.0	0	0.00	
59.11	1830	0.0	0	0.00	
59.36	2857	0.0	0	0.00	
59.86	4349	0.0	0	0.00	
60.23	1971	0.0	0	0.00	
60.50	1543	0.0	0	0.00	
60.67	1007	0.0	0	0.00	
61.03	1755	0.0	0	0.00	
61.49	2521	2.5	50	0.50	1,2-DE-3-CPA
61.61	2596	0.0	0	0.00	
61.99	1232	0.0	0	0.00	
62.14	2545	0.0	0	0.00	
62.60	3891	0.0	0	0.00	
62.87	4290	0.0	0	0.00	
63.33	770	0.0	0	0.00	
63.43	685	0.0	0	0.00	
63.78	1315	0.0	0	0.00	
63.98	650	0.0	0	0.00	
64.23	3281	2.5	50	0.50	1,2,4-TCB
64.65	15820	2.5	50	0.50	HEXACHLOROCYCLOHEPTADIENE
65.15	201	0.0	0	0.00	
65.37	2689	0.0	0	0.00	
65.83	3019	2.5	50	0.50	1,2,3-TCB
66.09	293	0.0	0	0.00	
66.24	776	0.0	0	0.00	
66.51	604	0.0	0	0.00	
66.70	1046	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 29, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(ug/kg)	Soil(ug/L)	Compound
5.92	9830	0.0	0	0.00	
6.51	2533	0.0	0	0.00	
6.72	3242	2.5	50	0.50	Vinyl Chloride
11.93	5234	0.0	0	0.00	
12.14	4192	2.5	50	0.50	1,1-dce
16.04	2945	2.5	50	0.50	Mtba
16.70	3191	2.5	50	0.50	Trans 1,2-dce
24.62	6857	2.5	50	0.50	Cis 1,2-dce
28.86	5358	2.5	50	0.50	1,1-dcpe
30.40	15869	2.5	50	0.50	Benzene
31.67	1050155	5.0	100	1.00	Fluorene (IS)
33.62	10626	2.5	50	0.50	Tce
38.43	2952	2.5	50	0.50	Cis 1,3-dcpe
39.69	15867	2.5	50	0.50	Toluene 0.01537 a.r. 03Jun96 U
40.75	3714	2.5	50	0.50	Trans 1,3-dcpe
42.47	10823	2.5	50	0.50	Pce 0.0105 a.r. 03Jun96 U
45.57	16635	25.0	500	5.00	1,1,1-tri (surr)
46.11	15784	2.5	50	0.50	Chlorobenzene
46.36	13833	2.5	50	0.50	Ethylbenzene
46.69	32486	5.0	100	1.00	M/P Xylene 0.0315 03Jun96 U
47.14	1032046	5.0	100	1.00	1,1,2-tri (IS)
48.54	13523	2.5	50	0.50	O Xylene 0.0131 a.r. 03Jun96 U
48.74	17656	2.5	50	0.50	Styrene
49.06	3755	0.0	0	0.00	
50.09	11376	2.5	50	0.50	Isopropylbenzene
51.79	12068	2.5	50	0.50	n-propylbenzene
51.94	16918	2.5	50	0.50	Bromobenzene 0.0639 a.r. 03Jun96 U
52.49	33827	5.0	100	1.00	1,3,5-tri/2-cl tol
52.72	16284	2.5	50	0.50	4-cl toluene
53.96	10074	2.5	50	0.50	t-butylbenzene
54.12	15842	2.5	50	0.50	1,2,4-tri
54.86	10966	2.5	50	0.50	s-butylbenzene
55.47	11158	2.5	50	0.50	p-isopropyltoluene
55.83	13442	2.5	50	0.50	1,3-dcb
56.31	16667	2.5	50	0.50	1,4-dcb
57.21	11851	2.5	50	0.50	n-butylbenzene
57.86	13414	2.5	50	0.50	1,2-dcb 0.01297 a.r. 03Jun96 U
60.13	2642	0.0	0	0.00	
64.16	5316	2.5	50	0.50	1,2,4-tcb
64.58	5378	2.5	50	0.50	Hexachlorobutadiene
64.99	3157	2.5	50	0.50	Napthalene ar=0.0079
66.78	3937	2.5	50	0.50	1,2,3-tcb

AE 13 Jun 96

McKenzie Laboratories - EPA GC Volatiles
 File : c:\eschrom\voatemp\160527.19
 Method : c:\eschrom\voatemp\lvoa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 29, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

Channel 3 Results

RT(min)	pK Area	ng	Soil (ug/kg)	Soln (ug/l)	Compound
0.70	333	0.0	0	0.00	
0.98	1168	0.0	0	0.00	
1.38	1989	0.0	0	0.00	
1.87	1424	0.0	0	0.00	
2.13	237	0.0	0	0.00	
2.42	612	0.0	0	0.00	
3.36	251	0.0	0	0.00	
3.64	591	0.0	0	0.00	
3.88	1004	0.0	0	0.00	
3.98	536	0.0	0	0.00	
4.39	2791	0.0	0	0.00	
4.75	671	0.0	0	0.00	
5.15	1413	0.0	0	0.00	
5.32	576	0.0	0	0.00	
5.74	4315	2.5	50	0.50	DCDFM 0.00508 a.r. 03 JUN 96 ✓
6.37	4380	2.5	50	0.50	CHLOROMETHANE
6.52	8766	0.0	0	0.00	
6.81	6486	2.5	50	0.50	VINYL CHLORIDE
7.11	1382	0.0	0	0.00	
7.57	2088	0.0	0	0.00	
7.86	1906	0.0	0	0.00	
8.22	488	2.5	50	0.50	BROMOMETHANE 0.00058 a.r. 03 JUN 96
8.37	448	0.0	0	0.00	
8.58	9253	2.5	50	0.50	CHLOROETHANE 0.0097 a.r. 03 JUN 96
8.97	1263	0.0	0	0.00	
9.46	6323	2.5	50	0.50	TCFM
9.73	306	0.0	0	0.00	
9.99	933	0.0	0	0.00	
10.42	1770	0.0	0	0.00	
10.69	666	0.0	0	0.00	
11.28	9461	2.5	50	0.50	FREON 113
11.95	351	0.0	0	0.00	
11.98	345	0.0	0	0.00	
12.25	10275	2.5	50	0.50	1,1-DCE 0.012-A.R.
12.69	1303	0.0	0	0.00	
13.25	880	0.0	0	0.00	
13.38	905	0.0	0	0.00	
13.71	1738	0.0	0	0.00	
14.08	2656	0.0	0	0.00	
14.52	1284	0.0	0	0.00	
15.06	150404	2.5	50	0.50	METH CHLORIDE
15.80	1309	0.0	0	0.00	
15.07	322	0.0	0	0.00	
16.02	542	0.0	0	0.00	
16.39	388	0.0	0	0.00	
16.79	9906	2.5	50	0.50	TRANS 1,2-DCE
17.13	868	0.0	0	0.00	
17.38	1286	0.0	0	0.00	
17.58	341	0.0	0	0.00	
17.78	188	0.0	0	0.00	
17.98	31	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 29, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

Channel 3 Results

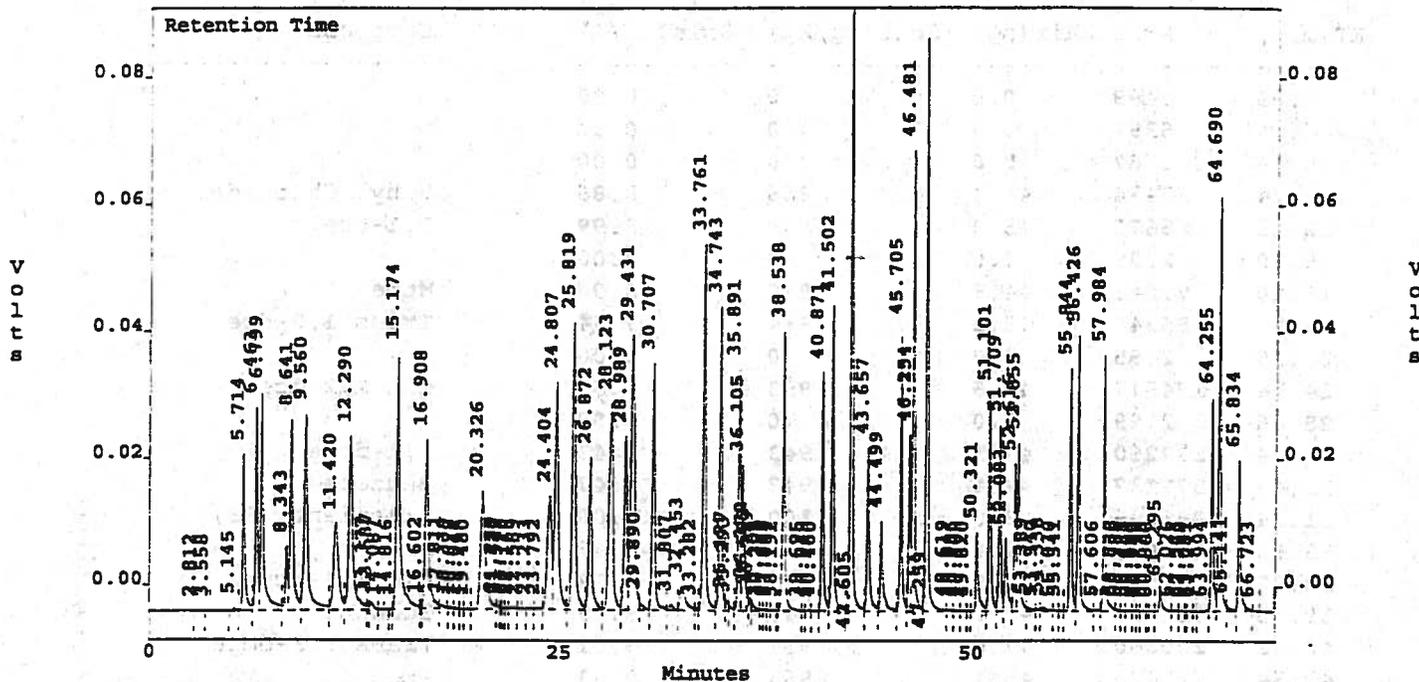
RT(min)	PK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
18.49	1764	0.0	0	0.00	
18.69	913	0.0	0	0.00	
19.98	335	0.0	0	0.00	
19.29	2374	0.0	0	0.00	
19.35	1345	0.0	0	0.00	
20.29	2260	2.5	50	0.50	1,1-DCA 0.0027 a.r. 03JUN96 U
20.42	1047	0.0	0	0.00	
20.81	1350	0.0	0	0.00	
21.35	1411	0.0	0	0.00	
21.56	929	0.0	0	0.00	
21.77	573	0.0	0	0.00	
22.09	972	0.0	0	0.00	
22.21	282	0.0	0	0.00	
22.40	1186	0.0	0	0.00	
22.58	362	0.0	0	0.00	
22.85	1184	0.0	0	0.00	
23.11	2165	0.0	0	0.00	
23.46	243	0.0	0	0.00	
23.59	935	0.0	0	0.00	
23.90	3910	0.0	0	0.00	
24.21	4647	2.5	50	0.50	2,2-DCPA
24.70	13456	2.5	50	0.50	CIS 1,2-DCE
25.19	449	0.0	0	0.00	
25.30	865	0.0	0	0.00	
25.72	19494	2.5	50	0.50	CHLOROFORM AK = 0.022
26.34	731	0.0	0	0.00	UI 31May96
26.73	5777	2.5	50	0.50	BCM
27.22	1225	0.0	0	0.00	
27.38	929	0.0	0	0.00	
28.01	15011	2.5	50	0.50	1,1,1-TCA
28.56	1303	0.0	0	0.00	
28.95	10892	2.5	50	0.50	1,1-DCPE
29.43	5405	2.5	50	0.50	CARBON TET
29.67	1910	0.0	0	0.00	
29.94	1311	0.0	0	0.00	
30.13	760	0.0	0	0.00	
30.38	631	0.0	0	0.00	
30.64	12385	2.5	50	0.50	1,2-DCA 0.0146 a.r. 03JUN96 U
31.03	1167	0.0	0	0.00	
31.24	1109	0.0	0	0.00	
31.74	39748	0.0	0	0.00	
32.34	4080	2.5	50	0.50	2-CL ETH VI ETH
32.65	974	0.0	0	0.00	
33.03	3984	0.0	0	0.00	
33.68	21749	2.5	50	0.50	TCE ✓ 0.0256 a.r. 03JUN96 U
34.43	1041	0.0	0	0.00	
34.71	12777	2.5	50	0.50	1,2-DCPA 0.0151 a.r. 03JUN96 U
35.03	1044	0.0	0	0.00	
35.23	584	0.0	0	0.00	
35.29	1094	0.0	0	0.00	
35.59	344	0.0	0	0.00	
35.83	4141	2.5	50	0.50	ETHYLENETHANE 0.00488 a.r. 03JUN96 U
36.17	333	0.0	0	0.00	

Continued...

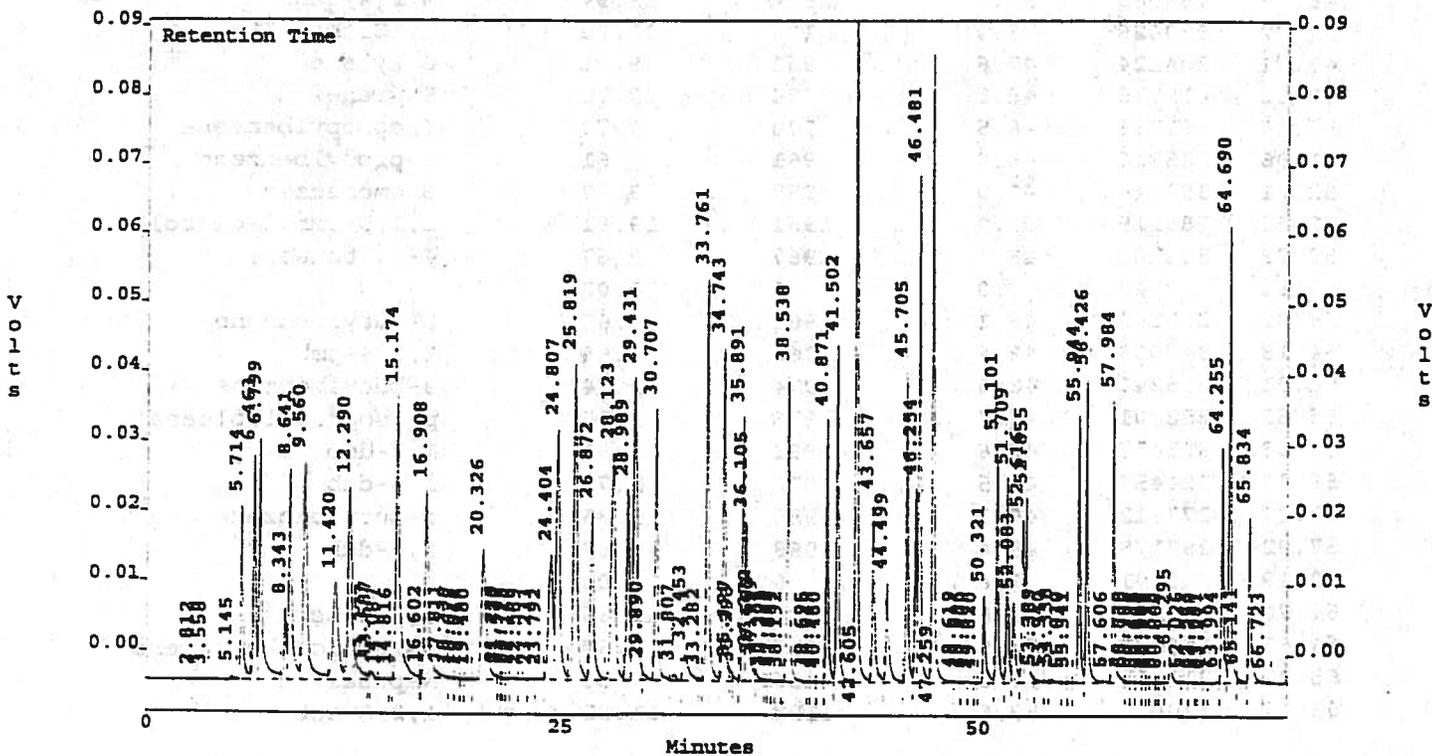
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.01
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : CTL VOA 1
 Acquired : Jun 02, 1996 10:37:06
 Printed : Jun 03, 1996 11:08:03

c:\ezchrom\chrom\160602.01 -- Channel B



c:\ezchrom\chrom\160602.01 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.01
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : CTL VOA 1
 Acquired : Jun 02, 1996 10:37:06
 Printed : Jun 03, 1996 11:08:06

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
5.09	2469	0.0	0	0.00	
6.14	5392	0.0	0	0.00	
6.54	2587	0.0	0	0.00	
6.74	32434	44.3	886	8.86	Vinyl Chloride
12.23	85670	45.0	899	8.99	1,1-dce
15.10	2086	0.0	0	0.00	
16.10	71843	44.5	890	8.90	Mtbe
16.83	185849	48.2	964	9.64	Trans 1,2-dce
24.30	2495	0.0	0	0.00	
24.74	174517	47.6	953	9.53	Cis 1,2-dce
28.06	2199	0.0	0	0.00	
28.94	132250	47.1	943	9.43	1,1-dcpe
30.47	371137	47.4	947	9.47	Benzene
31.74	985186	5.0	100	1.00	Flbenzene (IS)
33.68	201639	47.4	947	9.47	Tce
38.48	77147	48.6	972	9.72	Cis 1,3-dcpe
39.75	350994	47.4	949	9.49	Toluene
40.81	100860	47.6	951	9.51	Trans 1,3-dcpe
42.54	171420	48.1	963	9.63	Pce
45.64	360633	477.3	9546	95.46	1cl4fbz (surr) 95
46.19	367363	47.7	955	9.55	Chlorobenzene
46.44	338934	50.8	1016	10.16	Ethylbenzene
46.76	751085	97.7	1954	19.54	M/P Xylene
47.22	990626	5.0	100	1.00	1cl2flbz (IS)
48.61	304124	47.6	951	9.51	O Xylene
48.82	419278	48.5	970	9.70	Styrene
50.16	263733	48.5	970	9.70	Isopropylbenzene
51.86	285716	48.0	961	9.61	n-propylbenzene
52.01	393046	47.9	957	9.57	Bromobenzene
52.55	769219	98.0	1961	19.61	1,3,5-tmb/2-cl tol
52.79	364182	48.3	967	9.67	4-cl toluene
53.61	2047	0.0	0	0.00	
54.02	225195	48.1	961	9.61	t-butylbenzene
54.18	345063	48.4	968	9.68	1,2,4-tmb
54.91	256240	48.7	974	9.74	s-butylbenzene
55.52	258701	48.7	975	9.75	p-isopropyltoluene
55.88	323457	49.6	992	9.92	1,3-dcb
56.36	314457	48.5	970	9.70	1,4-dcb
57.27	277612	49.2	985	9.85	n-butylbenzene
57.92	257178	48.4	968	9.68	1,2-dcb
60.19	3691	0.0	0	0.00	
64.20	181368	56.8	1136	11.36	1,2,4-tcb
64.62	166682	71.9	1437	14.37	Hexachlorobutadiene
65.02	211257	47.8	956	9.56	Napthalene
65.77	170076	59.6	1192	11.92	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.01
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : CTL VOA 1
 Acquired : Jun 02, 1996 10:37:06
 Printed : Jun 03, 1996 11:08:06

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
2.81	434	0.0	0	0.00	
3.56	993	0.0	0	0.00	
5.15	6356	0.0	0	0.00	
5.71	235617	40.1	802	8.02 <i>OK CHK</i>	DCDFM
6.46	292872	35.6	713	7.13 \downarrow	CHLOROMETHANE
6.80	421282	44.3	886	8.86	VINYL CHLORIDE
8.34	99367	44.9	899	8.99	BROMOMETHANE
8.64	413764	44.1	882	8.82	CHLOROETHANE
9.56	532640	42.7	853	8.53	TCFM
11.42	303501	36.0	720	7.20 <i>OK CHK</i>	FREON 113
12.29	481093	39.5	790	7.90 \downarrow	1,1-DCE
13.38	4895	0.0	0	0.00	
13.59	16708	0.0	0	0.00	
14.09	1520	0.0	0	0.00	
14.82	1094	0.0	0	0.00	
15.17	644968	37.0	740	7.40 <i>OK CHK</i>	METH CHLORIDE
16.60	1750	0.0	0	0.00	
16.91	414313	37.7	753	7.53 \downarrow	TRANS 1,2-DCE
17.81	6905	0.0	0	0.00	
18.34	2163	0.0	0	0.00	
18.68	1249	0.0	0	0.00	
19.04	518	0.0	0	0.00	
19.48	1959	0.0	0	0.00	
20.33	399007	38.5	771	7.71 <i>OK CHK</i>	1,1-DCA
21.24	4278	0.0	0	0.00	
21.43	1738	0.0	0	0.00	
21.55	1826	0.0	0	0.00	
21.78	2289	0.0	0	0.00	
22.17	3420	0.0	0	0.00	
22.57	493	0.0	0	0.00	
23.23	1677	0.0	0	0.00	
23.79	2366	0.0	0	0.00	
24.40	339067	52.3	1047	10.47	2,2-DCPA
24.81	558144	46.5	931	9.31	CIS 1,2-DCE
25.82	672447	48.7	975	9.75	CHLOROFORM
26.87	320403	43.0	859	8.59	BCM
28.12	562460	47.8	957	9.57	1,1,1-TCA
28.99	349077	43.6	873	8.73	1,1-DCPE
29.43	700815	65.9	1319	13.19 \leftarrow	CARBON TET
29.89	16819	0.0	0	0.00	
30.71	427302	39.8	796	7.96 <i>OK CHK</i>	1,2-DCA
31.81	14313	0.0	0	0.00	
32.45	83781	53.3	1066	10.66	2-CL ETH VI ETH
33.28	3458	0.0	0	0.00	
33.76	616943	48.1	962	9.62	TCE

Continued...

File : c:\ezchrom\chrom\160602.01
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : CTL VOA 1
 Acquired : Jun 02, 1996 10:37:06
 Printed : Jun 03, 1996 11:08:06

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
34.74	508965	53.8	1077	10.77	1,2-DCPA
35.13	14977	0.0	0	0.00	
35.29	8741	0.0	0	0.00	
35.89	365202	50.5	1010	10.10	BRDCLMETHANE
36.11	248204	44.3	885	8.85	DIBROMOMETHANE
36.37	18457	0.0	0	0.00	
36.50	15474	0.0	0	0.00	
36.73	17973	0.0	0	0.00	
37.21	2121	0.0	0	0.00	
37.38	1942	0.0	0	0.00	
37.66	1935	0.0	0	0.00	
37.84	2006	0.0	0	0.00	
38.19	469	0.0	0	0.00	
38.54	398628	46.6	932	9.32	CIS 1,3-DCPE
39.69	675	0.0	0	0.00	
40.05	1168	0.0	0	0.00	
40.46	677	0.0	0	0.00	
40.87	329646	48.9	979	9.79	TRANS 1,3-DCPE
41.50	464756	40.5	810	8.10	1,1,2-TCA
42.61	1050899	88.1	1761	17.61	1,3 DCPA/PCE
43.66	282322	51.8	1035	10.35	DIBRCLMETHANE
44.50	173069	42.7	854	8.54	1,2-DBEA (EDB)
45.71	357508	470.3	9406	94.06	1CL4FBZ (SURR) 74
46.25	219794	48.3	966	9.66	CHLOROBENZENE
46.48	682645	54.0	1081	10.81	1,1,1,2-PCA
47.26	815614	5.0	100	1.00	1CL2FBZ (IS)
48.62	3683	0.0	0	0.00	
49.10	3525	0.0	0	0.00	
49.41	1863	0.0	0	0.00	
49.82	1000	0.0	0	0.00	
50.32	135157	45.6	911	9.11	BROMOFORM
51.10	316561	43.0	860	8.60	1,1,2,2-PCA
51.71	243311	46.2	923	9.23	1,2,3-TCPA
52.08	132095	47.0	939	9.39	BROMOBENZENE
52.62	200266	50.3	1006	10.06	2-CL TOLUENE
52.86	245482	49.9	998	9.98	4-CL TOLUENE
53.39	11666	0.0	0	0.00	
53.94	3210	0.0	0	0.00	
54.34	11973	0.0	0	0.00	
55.03	1949	0.0	0	0.00	
55.34	1700	0.0	0	0.00	
55.94	303634	45.3	907	9.07	1,3-DCB
56.43	370418	46.5	930	9.30	1,4-DCB
57.61	4143	0.0	0	0.00	
57.98	331238	49.4	987	9.87	1,2-DCB
58.74	3656	0.0	0	0.00	
58.99	1813	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160602.01
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : CTL VOA 1
 Acquired : Jun 02, 1996 10:37:06
 Printed : Jun 03, 1996 11:08:06

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
59.43	1873	0.0	0	0.00	
59.67	834	0.0	0	0.00	
60.01	586	0.0	0	0.00	
60.15	734	0.0	0	0.00	
60.53	402	0.0	0	0.00	
60.81	852	0.0	0	0.00	
61.30	38281	42.9	858	8.58	1,2-DBr-3-CPA
62.03	3611	0.0	0	0.00	
62.54	1769	0.0	0	0.00	
62.76	460	0.0	0	0.00	
63.09	1490	0.0	0	0.00	
63.25	533	0.0	0	0.00	
63.99	2943	0.0	0	0.00	
64.26	253959	49.6	991	9.91	1,2,4-TCB
64.69	523070	69.6	1392	13.92 *	HEXACHLOROCYCLOHEPTADIENE
65.14	11102	0.0	0	0.00	
65.83	213614	47.1	943	9.43	1,2,3-TCB
66.72	981	0.0	0	0.00	

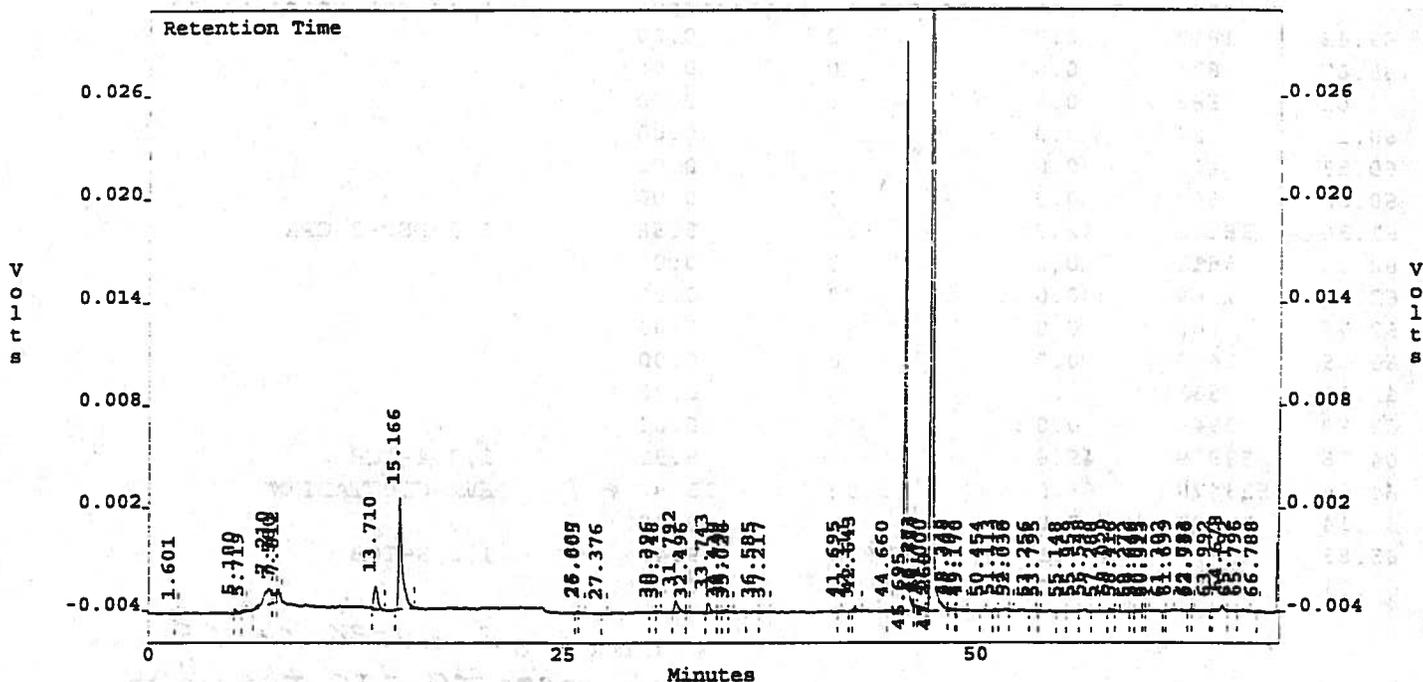
* out of $\pm 15\%$ range
 not reported for the day
 03 Jun 96 LT

AG 10 Jun 96

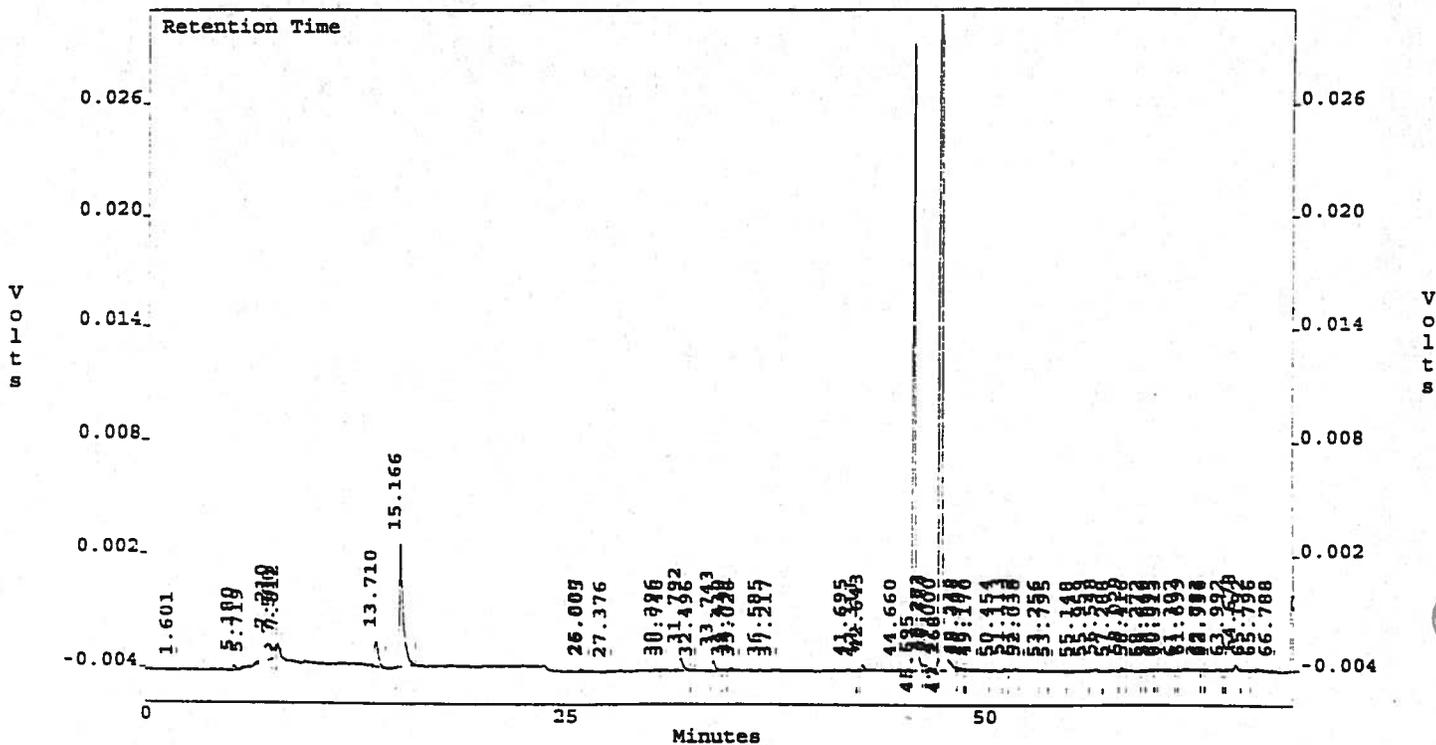
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.09
Method : c:\ezchrom\chrom\lvoa0527.met
Sample ID : 4862s 9
Acquired : Jun 02, 1996 22:38:45
Printed : Jun 03, 1996 11:10:25

c:\ezchrom\chrom\160602.09 -- Channel B



c:\ezchrom\chrom\160602.09 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.09
Method : c:\ezchrom\chrom\lvoa0527.met
Sample ID : 4862s 9
Acquired : Jun 02, 1996 22:38:45
Printed : Jun 03, 1996 11:10:27

Channel A Results

Table with columns: RT(min), Pk Area, Air(ng), Soil(µg/kg), Soln(µg/L), Compound. Contains 30 rows of data with handwritten annotations like 'NC', 'cmL', and 'AKB'.

96.1

NM Naphthalene 4r = 0.00246

OAS 13 JUN 96

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.09
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4862s 9
 Acquired : Jun 02, 1996 22:38:45
 Printed : Jun 03, 1996 11:10:28

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
1.60	424	0.0	0	0.00	
5.18	3262	0.0	0	0.00	
5.72	1318	5.0	101 <i>cmal by</i>	1.01	DCDFM
7.21	29431	0.0	0	0.00	
7.58	7549	0.0	0	0.00	
7.81	8210	0.0	0	0.00	
13.71	22522	0.0	0	0.00	
15.17	105771	1.7	34 <i>cmal</i>	0.34	METH CHLORIDE
25.89	1382	1.3	26 <i>l</i>	0.26	CHLOROFORM
26.00	1120	0.0	0	0.00	
27.38	754	0.0	0	0.00	
30.40	820	0.0	0	0.00	
30.75	656	3.9	79 <i>cmal by</i>	0.79	1,2-DCA
31.79	12191	0.0	0	0.00	
32.50	304	11.5	229 <i>FB</i>	2.29	2-CL-ETH VI ETH
33.74	8755	4.7	95 <i>cmal by</i>	0.95	TCE
34.43	891	0.0	0	0.00	
34.79	2372	2.3	45 <i>cmal</i>	0.45	1,2-DCPA
35.03	643	0.0	0	0.00	
36.58	1337	0.0	0	0.00	
37.22	1143	0.0	0	0.00	
41.69	478	0.0	0	0.00	
42.31	254	0.0	0	0.00	
42.64	3970	6.7	134	1.34	<i>NM</i> 1,3 DCPA/PCE <i>NC</i>
44.66	453	0.0	0	0.00	
45.70	283767	452.8	9057	90.57	1CL4FBZ (SURR) <i>91.1</i>
46.27	3498	0.0	0	0.00	
46.48	5783	3.5	71 <i>NM</i>	0.71	1,1,1,2-PCA
47.00	839	0.0	0	0.00	
47.27	673121 <i>✓</i>	5.0	100	1.00	1CL2FBZ (IS)
48.35	3190	0.0	0	0.00	
48.79	427	0.0	0	0.00	
49.17	1914	0.0	0	0.00	
50.45	536	0.0	0	0.00	
51.11	1635	5.0	100 <i>cmal by</i>	1.00	1,1,2,2-PCA
51.71	2534	2.9	58 <i>cmal</i>	0.58	1,2,3-TCPA
52.04	543	6.4	129 <i>cmal by</i>	1.29	BROMOBENZENE
53.26	881	0.0	0	0.00	
53.80	311	0.0	0	0.00	
55.15	1371	0.0	0	0.00	
55.96	2049	5.5	110 <i>NC</i>	1.10	1,3-DCB
56.55	3509	4.2	84 <i>cmal by</i>	0.84	1,4-DCB
57.29	906	0.0	0	0.00	
58.03	3043	6.2	125 <i>NC</i>	1.25	1,2-DCB
58.42	728	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160602.09
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4862s 9
 Acquired : Jun 02, 1996 22:38:45
 Printed : Jun 03, 1996 11:10:28

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
59.27	512	0.0	0	0.00	
59.65	1800	0.0	0	0.00	
60.10	447	0.0	0	0.00	
60.31	387	0.0	0	0.00	
61.30	245	14.2	284 NM	2.84	1,2-DBr-3-CPA
61.70	1218	0.0	0	0.00	
62.78	692	0.0	0	0.00	
62.94	255	0.0	0	0.00	
63.99	267	0.0	0	0.00	
64.68	6083	6.5	130	1.30	HEXACL BUTADIENE
65.19	1483	0.0	0	0.00	
65.80	2954	10.6	212	2.12	1,2,3-TCB
66.79	624	0.0	0	0.00	

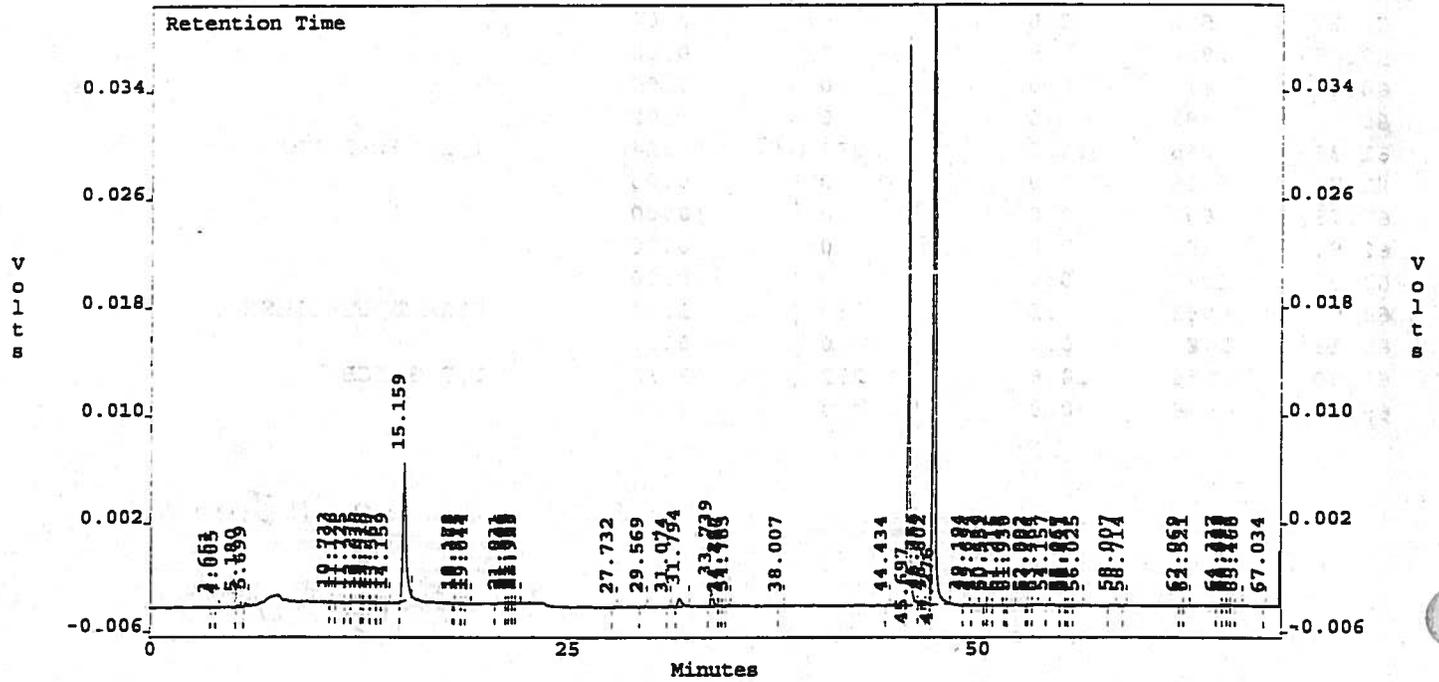
UI 11 Jun 96

AB 13 Jun 96

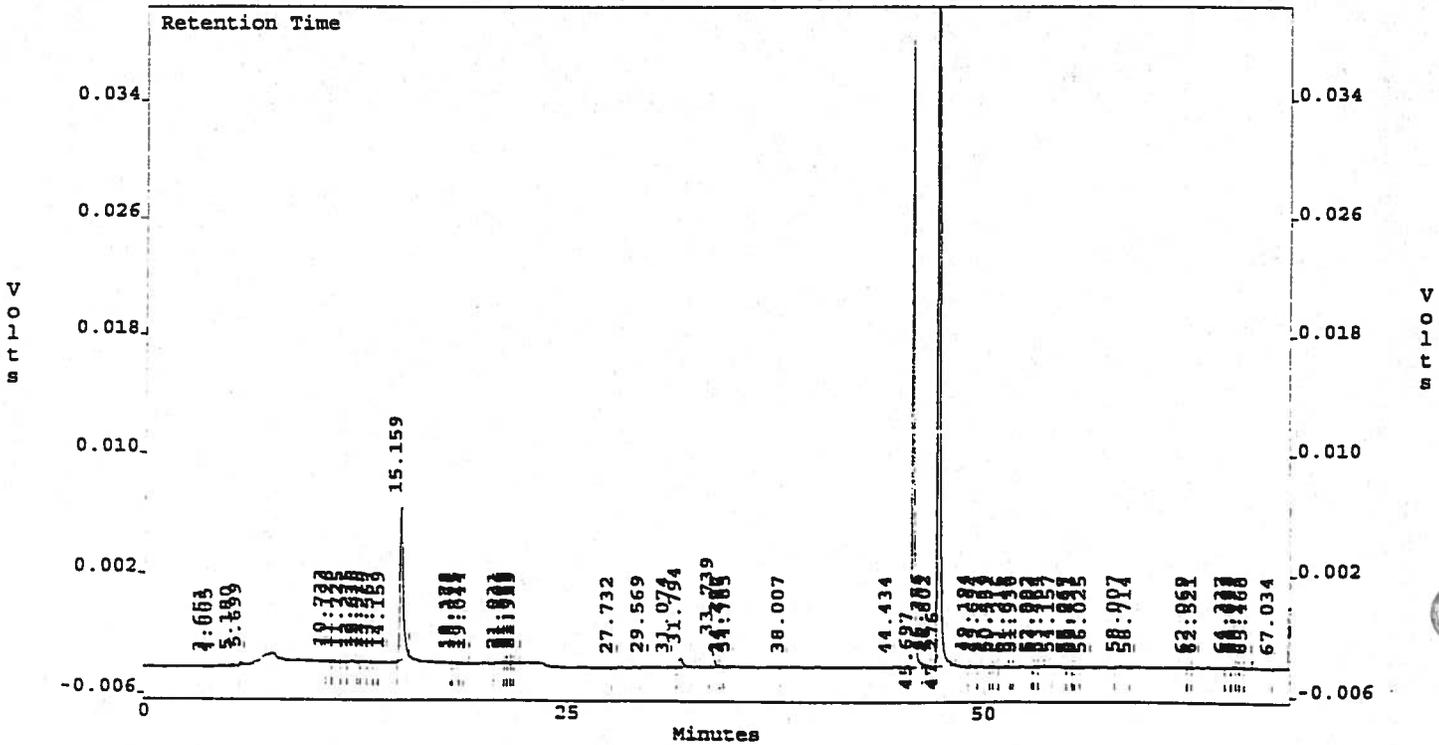
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.10
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 4863B 10
 Acquired : Jun 03, 1996 00:05:41
 Printed : Jun 03, 1996 11:10:41

c:\ezchrom\chrom\160602.10 -- Channel B



c:\ezchrom\chrom\160602.10 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.10
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 4863s 10
 Acquired : Jun 03, 1996 00:05:41
 Printed : Jun 03, 1996 11:10:43

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.13	3512	0.0	0	0.00	
6.53	7841	0.0	0	0.00	
12.08	6782	0.0	0	0.00	
31.72	1048271	5.0	100	1.00	Flbenzene (IS)
32.37	5552	0.0	0	0.00	
33.66	7499	3.4	67 NC	0.67	Tce
39.73	2261	2.3	46 <MAL	0.46	Toluene
45.63	390261	492.4	9847	98.47	1cl4fbz (surr) 98.47
46.17	2192	2.4	49 <MAL	0.49	Chlorobenzene
46.76	2656	3.0	59 ↓	0.59	M/P Xylene
47.21	1037715	5.0	100	1.00	1cl2flbz (IS)
48.62	2076	2.5	49 <MAL	0.49	O Xylene
49.12	6335	0.0	0	0.00	
52.54	2299	3.0	59 <MAL	0.59	1,3,5-tmb/2-cl tol
54.18	5361	2.2	44 ↓	0.44	1,2,4-tmb
54.53	2193	0.0	0	0.00	
54.92	2075	2.6	52 ↓	0.52	s-butylbenzene
55.50	2198	2.6	52 ↓	0.52	p-isopropyltoluene
56.41	13121	2.5	50 NC	0.50	1,4-dcb
57.26	4929	3.0	59 <MAL by V	0.59	n-butylbenzene
57.45	2124	0.0	0	0.00	
57.91	3626	1.3	26 <MAL	0.26	1,2-dcb
59.21	4931	0.0	0	0.00	
60.17	2560	0.0	0	0.00	
61.88	4374	0.0	0	0.00	
62.99	2261	0.0	0	0.00	
63.27	6282	0.0	0	0.00	
65.02	4169	1.8	37 <MAL	0.37	Napthalene
65.59	5678	0.0	0	0.00	
65.76	2095	2.3	45 ↓	0.45	1,2,3-tcb
66.02	4197	0.0	0	0.00	
66.40	3467	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.10
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4863s 10
 Acquired : Jun 03, 1996 00:05:41
 Printed : Jun 03, 1996 11:10:43

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
3.65	438	0.0	0	0.00	
4.01	242	0.0	0	0.00	
5.18	1560	0.0	0	0.00	
5.70	2040	5.1	102 <i>ML by</i>	1.02	DCDFM
10.73	313	0.0	0 <i>AR</i>	0.00	
11.13	1842	3.2	63 <i>ML</i>	0.63	FREON 113
11.72	968	0.0	0	0.00	
12.28	1232	2.7	54 <i>NC</i>	0.54	1,1-DCE
12.64	458	0.0	0	0.00	
12.92	1574	0.0	0	0.00	
13.22	591	0.0	0	0.00	
13.57	608	0.0	0	0.00	
14.16	1169	0.0	0	0.00	
15.16	146014	3.5	70 <i>ML</i>	0.70	METH CHLORIDE
18.18	230	0.0	0	0.00	
18.36	782	0.0	0	0.00	
18.72	357	0.0	0	0.00	
19.04	662	0.0	0	0.00	
21.03	1448	0.0	0	0.00	
21.37	295	0.0	0	0.00	
21.58	623	0.0	0	0.00	
21.77	712	0.0	0	0.00	
21.92	699	0.0	0	0.00	
27.73	499	0.0	0	0.00	
29.57	725	0.0	0	0.00	
31.07	507	0.0	0	0.00	
31.79	11544	0.0	0	0.00	
33.74	13756	5.0	100 <i>ML by</i>	1.00	TCE
34.29	802	0.0	0 <i>AR</i>	0.00	
34.43	363	0.0	0	0.00	
34.78	1036	2.1	42 <i>ML</i>	0.42	1,2-DCPA
38.01	377	0.0	0	0.00	
44.43	421	6.1	122 <i>NM</i>	1.22	1,2-DBEA (EDB)
45.70	344718	480.1	9601	96.01	1CL4FBZ (SURR) 96%
46.36	4643	0.0	0	0.00	
46.80	842	0.0	0	0.00	
47.28	769968 ✓	5.0	100	1.00	1CL2FBZ (IS)
49.19	1988	0.0	0	0.00	
49.69	1133	0.0	0	0.00	
50.44	712	6.4	129 <i>ML by</i>	1.29	BROMOFORM
50.55	863	0.0	0 <i>AR</i>	0.00	
51.22	1171	0.0	0	0.00	
51.64	234	2.4	47 <i>ML</i>	0.47	1,2,3-TCPA
51.93	845	6.5	130 <i>NC</i>	1.30	BROMOBENZENE
52.89	222	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160602.12
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 48658 12 SD **AE AB-13JUN96**
 Acquired : Jun 03, 1996 03:05:11
 Printed : Jun 03, 1996 11:11:19

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
35.30	3092	0.0	0	0.00	
35.62	1082	0.0	0	0.00	
35.88	148784	22.1	441	4.41	BRD1CLMETHANE
36.12	113149	25.1	502	5.02	DIBROMOMETHANE
36.99	1168	0.0	0	0.00	
37.18	954	0.0	0	0.00	
38.53	124162	15.2	303	3.03	CIS 1,3-DCPE
39.17	1216	0.0	0	0.00	
39.36	1879	0.0	0	0.00	
40.86	121870	20.6	411	4.11	TRANS 1,3-DCPE
41.50	203360	17.9	359	3.59	1,1,2-TCA
42.59	441726	37.4	748	7.48	1,3 DCPA/PCE
43.34	3207	0.0	0	0.00	
43.65	101651	20.3	407	4.07	DIBRCLMETHANE
44.51	61110	18.3	367	3.67	1,2-DBEA (EDB)
45.17	2154	0.0	0	0.00	
45.68	166915	216.4	4327	43.27	1CL4FBZ (SURR) 87% CHLOROBENZENE
46.22	80192	20.3	406	4.06	
46.47	284059	23.2	464	4.64	1,1,1,2-PCA
47.26	857736	5.0	100	1.00	1CL2FBZ (IS)
48.43	4482	0.0	0	0.00	
48.68	1884	0.0	0	0.00	
48.80	3883	0.0	0	0.00	
49.31	3350	0.0	0	0.00	
49.66	903	0.0	0	0.00	
49.87	1320	0.0	0	0.00	
50.32	42882	18.2	363	3.63	BROMOFORM
51.09	128219	19.5	390	3.90	1,1,2,2-PCA
51.69	101196	19.7	393	3.93	1,2,3-TCPA
52.08	43679	19.0	381	3.81	BROMOBENZENE
52.62	82956	22.3	445	4.45	2-CL TOLUENE
52.82	112546	23.8	476	4.76	4-CL TOLUENE
53.70	1023	0.0	0	0.00	
53.83	1257	0.0	0	0.00	
54.02	1123	0.0	0	0.00	
54.33	3017	0.0	0	0.00	
54.67	974	0.0	0	0.00	
55.03	968	0.0	0	0.00	
55.32	489	0.0	0	0.00	
55.95	102127	18.0	360	3.60	1,3-DCB
56.42	131576	17.9	357	3.57	1,4-DCB
56.88	6119	0.0	0	0.00	
57.21	1648	0.0	0	0.00	
57.36	1498	0.0	0	0.00	
57.97	122112	21.0	421	4.21	1,2-DCB
58.40	7438	0.0	0	0.00	
59.09	2042	0.0	0	0.00	

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File : c:\ezchrom\chrom\160602.12
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 48658 12 SD **AE 13 Jun 96**
 Acquired : Jun 03, 1996 03:05:11
 Printed : Jun 03, 1996 11:11:19

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
59.49	3565	0.0	0	0.00	
60.04	3388	0.0	0	0.00	
60.56	2204	0.0	0	0.00	
60.69	508	0.0	0	0.00	
61.28	12578	23.0	460	4.60	1,2-DBr-3-CPA
61.78	2106	0.0	0	0.00	
62.10	638	0.0	0	0.00	
62.29	462	0.0	0	0.00	
62.49	1100	0.0	0	0.00	
62.73	877	0.0	0	0.00	
63.06	463	0.0	0	0.00	
63.53	2021	0.0	0	0.00	
63.75	276	0.0	0	0.00	
64.23	78765	20.2	403	4.03	1,2,4-TCB
64.65	151051	23.2	463	4.63	HEXACL BUTADIENE
65.12	2310	0.0	0	0.00	
65.80	74328	22.3	445	4.45	1,2,3-TCB
66.65	1232	0.0	0	0.00	
67.02	388	0.0	0	0.00	

sample wt = ~~4~~ 26.5 **AE 13 Jun 96**

UI 11 Jun 96

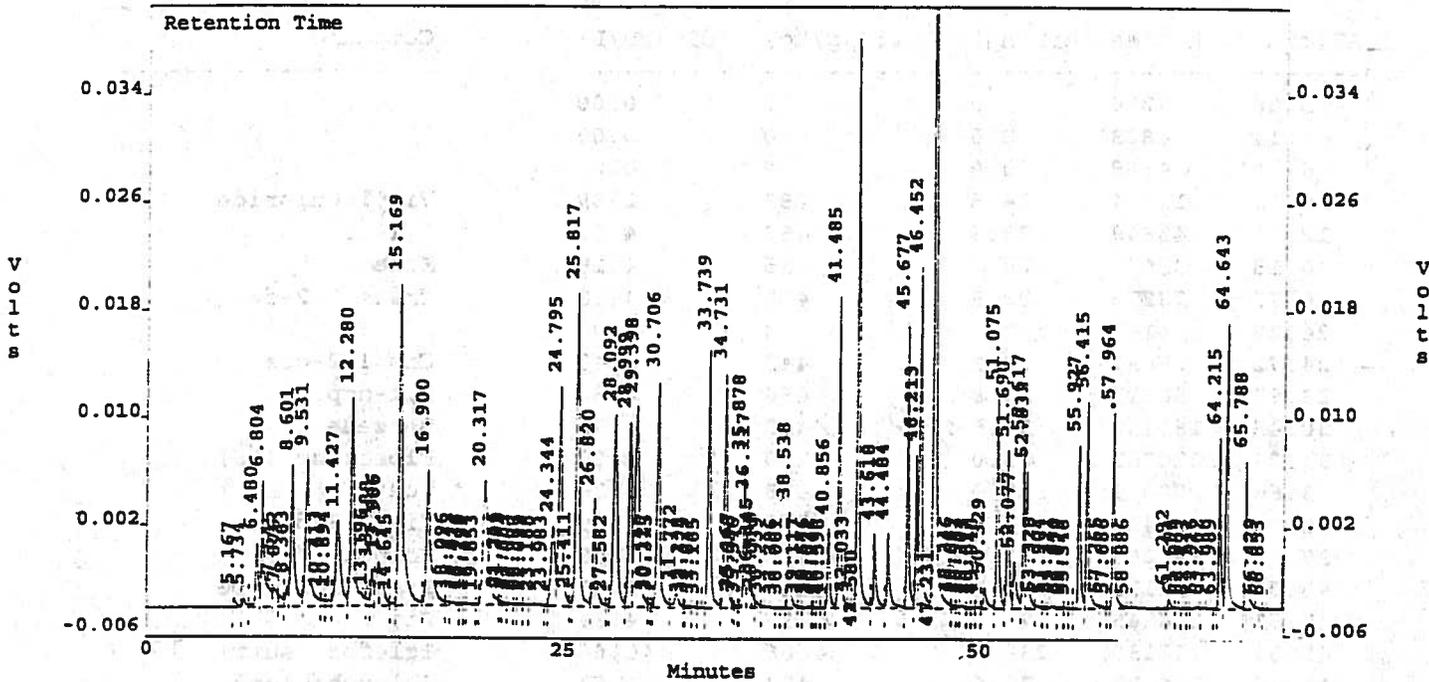
$$\text{recovery} = \frac{\text{extract amt.} (21.0 \text{ mL})(\text{ng response})}{\text{injected amt.} (0.050 \text{ mL})(26.5 \text{ g})} = \text{ng } (15.85) \frac{\mu\text{g}}{\text{kg}}$$

AE 13 Jun 96

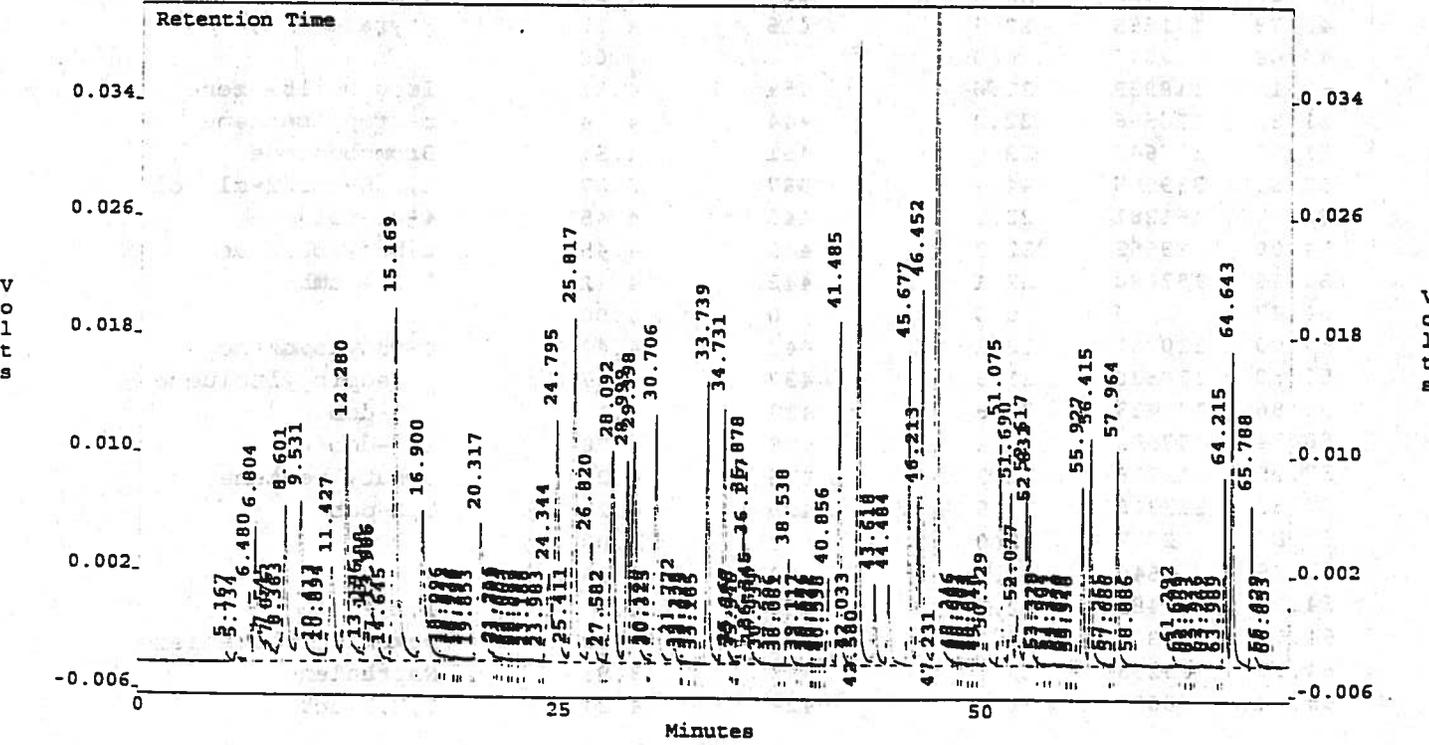
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.13
Method : c:\ezchrom\chrom\1voa0527.met
Sample ID : 4866s SD 13 S (AE) B13 JUN 96
Acquired : Jun 03, 1996 04:33:06
Printed : Jun 03, 1996 11:11:37

c:\ezchrom\chrom\160602.13 -- Channel B



c:\ezchrom\chrom\160602.13 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.13
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 4866s SD 13 S (AE) 13 Jun 96
 Acquired : Jun 03, 1996 04:33:06
 Printed : Jun 03, 1996 11:11:39

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.08	3286	0.0	0	0.00	
6.14	4823	0.0	0	0.00	
6.54	4869	0.0	0	0.00	
6.73	11074	14.5	289	2.89	Vinyl Chloride
12.19	43848	22.6	452	4.52	1,1-dce
16.15	32673	20.7	415	4.15	Mtbe
16.79	78275	20.9	418	4.18	Trans 1,2-dce
24.22	4154	0.0	0	0.00	
24.72	77091	22.1	443	4.43	Cis 1,2-dce
28.92	60795	22.8	456	4.56	1,1-dcpe
30.45	160192	21.5	350 ✓430	4.30	Benzene
31.73	1026703	5.0	100	1.00	Flbenzene (IS)
33.66	90043	21.9	438	4.38	Tce
38.46	18426	13.8	275	2.75	Cis 1,3-dcpe
39.72	159067	22.4	305 ✓448	4.48	Toluene
40.79	21113	12.1	241	2.41	Trans 1,3-dcpe
42.51	76249	22.0	358 ✓439	4.39	Pce
45.62	167230	230.3	4606	46.06	1cl4fbz (surr) 92. /
46.16	166623	22.6	453	4.53	Chlorobenzene
46.41	148033	22.2	443	4.43	Ethylbenzene
46.73	338269	45.0	900	9.00	M/P Xylene
47.19	1001301	5.0	100	1.00	1cl2flbz (IS)
48.58	139416	22.8	455	4.55	O Xylene
48.78	171895	20.7	415	4.15	Styrene
49.08	7077	0.0	0	0.00	
50.13	118989	22.6	451	4.51	Isopropylbenzene
51.83	126556	22.2	444	4.44	n-propylbenzene
51.98	177642	22.6	451	4.51	Bromobenzene
52.53	339965	44.4	887	8.87	1,3,5-tmb/2-cl tol
52.77	161281	22.2	445	4.45	4-cl toluene
54.00	99662	22.2	445	4.45	t-butylbenzene
54.16	153080	22.1	442	4.42	1,2,4-tmb
54.47	2939	0.0	0	0.00	
54.90	110751	22.1	442	4.42	s-butylbenzene
55.50	110530	21.9	437	4.37	p-isopropyltoluene
55.86	134413	20.8	417	4.17	1,3-dcb
56.34	137909	21.4	428	4.28	1,4-dcb
57.25	113778	21.3	425	4.25	n-butylbenzene
57.89	113310	21.5	350 ✓429	4.29	1,2-dcb
61.84	2222	0.0	0	0.00	
63.25	3546	0.0	0	0.00	
64.16	67483	22.7	454	4.54	1,2,4-tcb
64.59	55863	25.0	499	4.99	Hexachlorobutadiene
64.99	85228	19.6	393	3.93	Napthalene
65.73	58601	21.2	424	4.24	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.13
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 4866s SDS 13 (H) AG 13 JUN 96
 Acquired : Jun 03, 1996 04:33:06
 Printed : Jun 03, 1996 11:11:39

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.17	8500	0.0	0	0.00	
5.73	8189	5.9	118	1.18	DCDFM
6.48	57326	9.2	184	1.84	CHLOROMETHANE
6.80	127403	10.5	210	2.10	VINYL CHLORIDE
7.54	25110	0.0	0	0.00	
7.88	14213	0.0	0	0.00	
8.36	17105	10.3	207	2.07	BROMOMETHANE
8.60	159218	16.4	329	3.29	CHLOROETHANE
9.53	197819	14.9	297	2.97	TCFM
10.41	8349	0.0	0	0.00	
10.89	10277	0.0	0	0.00	
11.43	142791	16.9	339	3.39	FREON 113
12.28	241708	19.3	314 ✓ 385	3.85	1,1-DCE
13.20	8503	0.0	0	0.00	
13.49	29637	0.0	0	0.00	
13.87	40671	0.0	0	0.00	
13.97	54554	0.0	0	0.00	
14.64	3535	0.0	0	0.00	
15.17	421582	18.9	377	3.77	METH CHLORIDE
16.90	201671	18.4	368	3.68	TRANS 1,2-DCE
18.10	4830	0.0	0	0.00	
18.44	6454	0.0	0	0.00	
18.94	2375	0.0	0	0.00	
19.15	1166	0.0	0	0.00	
19.35	3472	0.0	0	0.00	
19.85	775	0.0	0	0.00	
20.32	204031	19.6	391	3.91	1,1-DCA
21.22	2777	0.0	0	0.00	
21.39	3410	0.0	0	0.00	
21.68	2616	0.0	0	0.00	
22.06	821	0.0	0	0.00	
22.38	1373	0.0	0	0.00	
22.70	833	0.0	0	0.00	
23.19	492	0.0	0	0.00	
23.98	700	0.0	0	0.00	
24.34	101625	15.9	318	3.18	2,2-DCPA
24.80	245167	20.4	407	4.07	CIS 1,2-DCE
25.41	2591	0.0	0	0.00	
25.82	326637	22.0	440	4.40	CHLOROFORM
26.82	122058	17.7	354	3.54	BCM
27.58	1640	0.0	0	0.00	
28.09	248554	20.2	329 ✓ 403	4.03	1,1,1-TCA
29.00	173353	21.0	420	4.20	1,1-DCPE
29.40	278357	27.9	558	5.58	CARBON TET
30.13	2792	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160602.13
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4866s *SD 5* 13 *AE AB 13 Jun 96*
 Acquired : Jun 03, 1996 04:33:06
 Printed : Jun 03, 1996 11:11:40

Channel B Results

RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
30.31	1597	0.0	0	0.00	
30.71	209010	19.7	394	3.94	1,2-DCA
31.77	21944	0.0	0	0.00	
32.24	834	11.7	233	2.33	2-CL ETH VI ETH
32.47	2717	0.0	0	0.00	
32.84	1430	0.0	0	0.00	
33.17	658	0.0	0	0.00	
33.74	215060	17.8 ²⁹⁰	✓356	3.56	TCE
34.73	188944	19.3	386	3.86	1,2-DCPA
35.17	3247	0.0	0	0.00	
35.30	2120	0.0	0	0.00	
35.55	818	0.0	0	0.00	
35.88	96120	15.0	299	2.99	BRDICLMETHANE
36.12	89118	21.4	427	4.27	DIBROMOMETHANE
36.35	10155	0.0	0	0.00	
36.60	6273	0.0	0	0.00	
36.94	613	0.0	0	0.00	
37.80	661	0.0	0	0.00	
38.08	660	0.0	0	0.00	
38.54	69594	9.0	181	1.81	CIS 1,3-DCPE
39.12	1180	0.0	0	0.00	
39.68	2298	0.0	0	0.00	
39.92	325	0.0	0	0.00	
40.07	367	0.0	0	0.00	
40.25	330	0.0	0	0.00	
40.60	458	0.0	0	0.00	
40.86	58121	12.1	242	2.42	TRANS 1,3-DCPE
41.49	210874	17.7	353	3.53	1,1,2-TCA
42.03	2758	0.0	0	0.00	
42.58	409891	33.5	670	6.70	1,3 DCPA/PCE
43.62	65385	14.0	279	2.79	DIBRCLMETHANE
44.48	66509	18.7	374	3.74	1,2-DBEA (EDB)
45.68	171800	211.1	4223	42.23	1CL4FBZ (SURR) 84. /.
46.21	88840	21.0	421	4.21	CHLOROENZENE
46.45	260820	20.6	411	4.11	1,1,1,2-PCA
47.23	906166	5.0	100	1.00	1CL2FBZ (IS)
48.35	4011	0.0	0	0.00	
48.67	1862	0.0	0	0.00	
48.94	3477	0.0	0	0.00	
49.30	1054	0.0	0	0.00	
49.61	1445	0.0	0	0.00	
49.94	1612	0.0	0	0.00	
50.33	21465	11.9	238	2.38	BROMOFORM
51.07	150851	21.2	424	4.24	1,1,2,2-PCA
51.69	104250	19.2	385	3.85	1,2,3-TCPA
52.08	43098	18.2	364	3.64	BROMOBENZENE
52.62	87369	22.2	444	4.44	2-CL TOLUENE

Continued...

file : c:\ezchrom\chrom\160602.13
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4866s SDS 13 REAG 13 JUN 96
 Acquired : Jun 03, 1996 04:33:06
 Printed : Jun 03, 1996 11:11:40

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
52.83	102956	21.1	422	4.22	4-CL TOLUENE
53.33	4473	0.0	0	0.00	
53.90	2513	0.0	0	0.00	
54.32	3926	0.0	0	0.00	
54.83	2679	0.0	0	0.00	
55.07	1129	0.0	0	0.00	
55.35	664	0.0	0	0.00	
55.93	112992	18.6	373	3.73	1,3-DCB
56.41	149886	19.0	380	3.80	1,4-DCB
57.26	2559	0.0	0	0.00	
57.69	1108	0.0	0	0.00	
57.96	136834	22.0	439	4.39	1,2-DCB
58.89	676	0.0	0	0.00	
61.29	7433	19.0	380	3.80	1,2-DBr-3-CPA
61.69	301	0.0	0	0.00	
62.06	898	0.0	0	0.00	
62.42	330	0.0	0	0.00	
62.92	2137	0.0	0	0.00	
63.26	783	0.0	0	0.00	
63.99	1058	0.0	0	0.00	
64.22	97788	22.3	447	4.47	1,2,4-TCB
64.64	200440	27.7	553	5.53	HEXAChL BUTADIENE
65.79	90881	24.2	484	4.84	1,2,3-TCB
66.43	2815	0.0	0	0.00	
66.85	642	0.0	0	0.00	

weight = 25.8g

Assigned: 4862-64
4867, 6A

UI 11 Jun 96

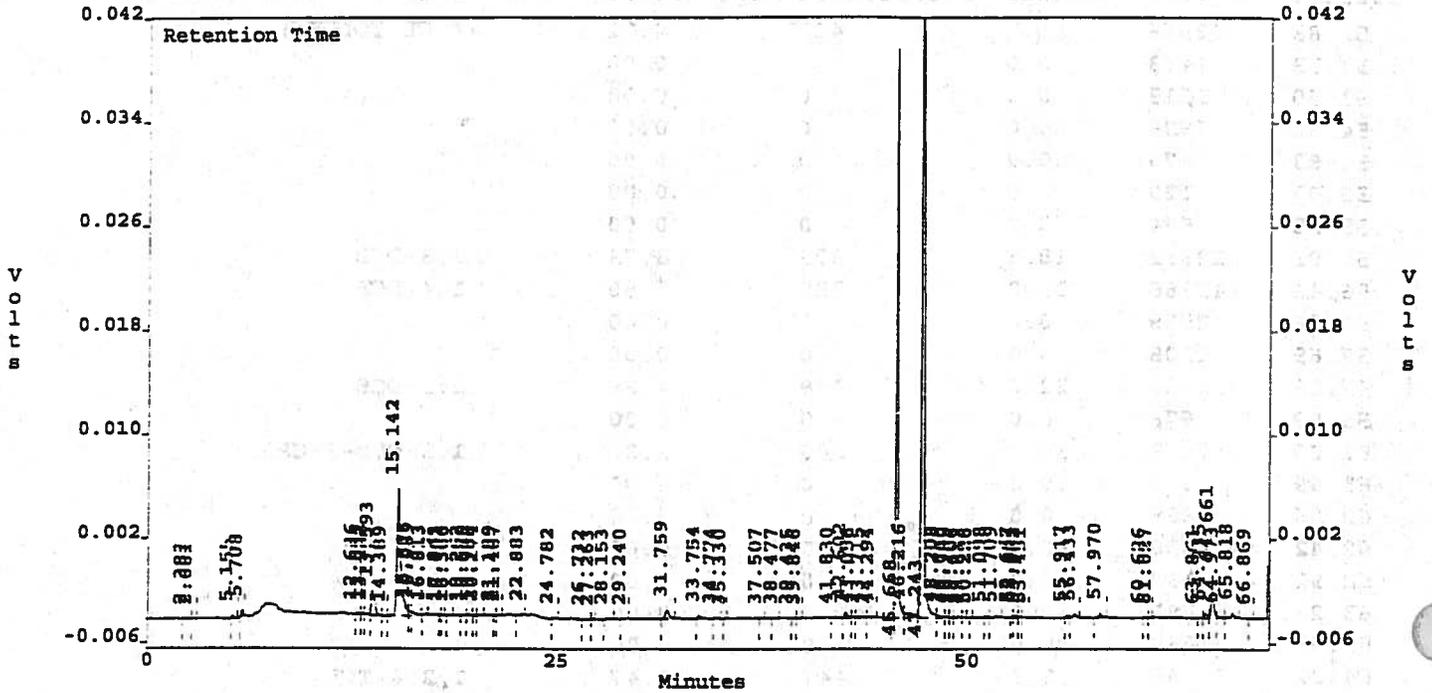
$$\text{recovery} = \frac{(21.0 \text{ mL})(\text{ng response})}{(0.050 \text{ mL})(25.8 \text{ g})} = \text{ng} (16.28 \frac{\mu\text{g}}{\text{g}})$$

REAG 13 JUN 96

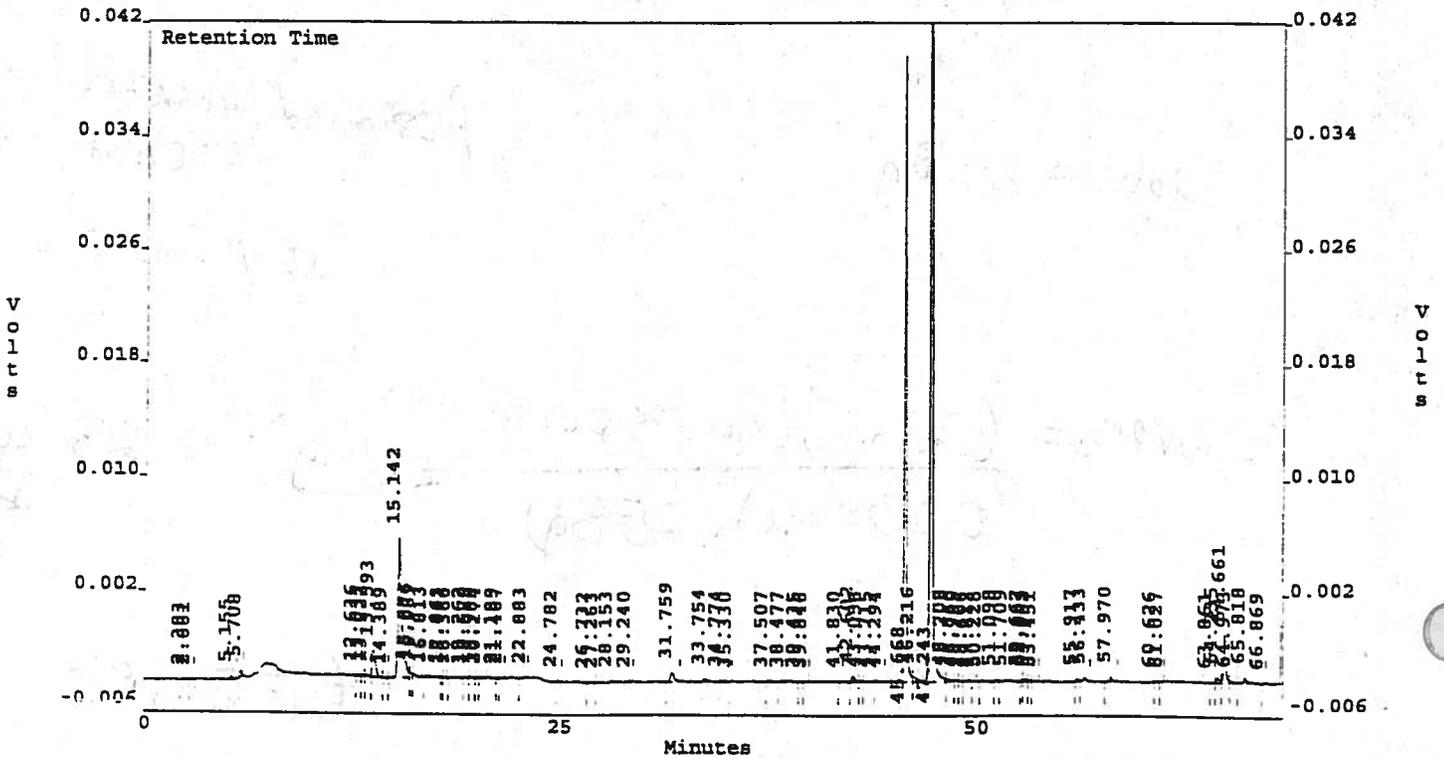
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.14
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 4867s 14
 Acquired : Jun 03, 1996 06:00:24
 Printed : Jun 03, 1996 11:11:54

c:\ezchrom\chrom\160602.14 -- Channel B



c:\ezchrom\chrom\160602.14 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.14
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 4867s 14
 Acquired : Jun 03, 1996 06:00:24
 Printed : Jun 03, 1996 11:11:57

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
6.14	4081	0.0	0	0.00	
6.54	4641	0.0	0	0.00	
6.70	2392	2.5	50 NC	0.50	Vinyl Chloride
12.08	6376	3.0	59 NC	0.59	1,1-dce
31.72	1018528	5.0	100	1.00	Flbenzene (IS)
33.66	3564	2.5	51 NC	0.51	Tce
39.72	4779	2.6	53 LMA by W	0.53	Toluene
42.50	2657	2.1	42 LMA	0.42	Pce
45.61	350361	454.6	9091	90.91	1cl4fbz (surr) 91/.
46.15	4941	2.8	56 LMA by W	0.56	Chlorobenzene
46.40	3814	0.9	19 LMA	0.19	Ethylbenzene
46.72	9831	3.8	77 ↓	0.77	M/P Xylene
47.18	1012828	5.0	100	1.00	1cl2flbz (IS)
48.59	3673	2.7	54 LMA by W	0.54	O Xylene
48.79	4775	2.3	47 LMA	0.47	Styrene
49.10	7271	0.0	0	0.00	
50.13	2894	2.1	43	0.43	Isopropylbenzene
51.31	2198	0.0	0	0.00	
51.83	4500	2.7	55	0.55	n-propylbenzene
51.98	4465	2.6	52	0.52	Bromobenzene
52.53	14212	4.4	88 ↓	0.88	1,3,5-tmb/2-cl tol
52.76	7091	2.8	55 NM	0.55	4-cl toluene
54.00	3118	2.7	54 LMA	0.54	t-butylbenzene
54.16	9360	2.8	55	0.55	1,2,4-tmb
54.52	3249	0.0	0	0.00	
54.89	5543	3.2	65	0.65	s-butylbenzene
55.49	4936	3.1	61	0.61	p-isopropyltoluene
55.86	6255	1.7	34 ↓	0.34	1,3-dcb
56.40	23229	4.1	81 NC	0.81	1,4-dcb
57.24	10058	3.8	77 NM	0.77	n-butylbenzene
57.89	7374	2.0	40 LMA	0.40	1,2-dcb
59.18	3148	0.0	0	0.00	
59.58	2065	0.0	0	0.00	
61.00	3131	0.0	0	0.00	
61.38	2362	0.0	0	0.00	
63.23	3659	0.0	0	0.00	
64.17	4787	4.2	84 NM	0.84	1,2,4-tcb
64.59	11681	6.5	130 ↓	1.30	Hexachlorobutadiene
65.00	10326	3.2	64	0.64	Napthalene
65.75	12313	5.6	113 ↓	1.13	1,2,3-tcb
66.34	4376	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.14
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 4867s 14
 Acquired : Jun 03, 1996 06:00:24
 Printed : Jun 03, 1996 11:11:57

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
2.38	888	0.0	0	0.00	
2.68	339	0.0	0	0.00	
5.16	2113	0.0	0	0.00	
5.71	3515	5.4	107 <i><MCL by AR</i>	1.07	DCDFM
12.64	1241	0.0	0	0.00	
13.03	1014	0.0	0	0.00	
13.22	1392	0.0	0	0.00	
13.59	28829	0.0	0	0.00	
14.39	474	0.0	0	0.00	
15.14	167147	5.1	102 <i><MCL</i>	1.02	METH CHLORIDE
15.88	3641	0.0	0	0.00	
16.09	4788	0.0	0	0.00	
16.81	950	3.5	70 <i>NC</i>	0.70	TRANS 1,2-DCE
17.86	283	0.0	0	0.00	
18.00	354	0.0	0	0.00	
18.37	1115	0.0	0	0.00	
19.26	870	0.0	0	0.00	
19.58	1312	0.0	0	0.00	
19.98	409	0.0	0	0.00	
20.17	1239	0.0	0	0.00	
21.19	326	0.0	0	0.00	
21.47	711	0.0	0	0.00	
22.88	1474	0.0	0	0.00	
24.78	1005	3.3	67 <i>NC</i>	0.67	CIS 1,2-DCE
26.73	1572	0.0	0	0.00	
27.26	392	0.0	0	0.00	
28.15	2567	2.1	42 <i><MCL</i>	0.42	1,1,1-TCA
29.24	1080	0.0	0	0.00	
31.76	11535	0.0	0	0.00	
33.75	3456	4.2	85 <i><MCL by AR</i>	0.85	TCE
34.77	1754	2.2	43 <i><MCL</i>	0.43	1,2-DCPA
35.33	237	0.0	0	0.00	
37.51	575	0.0	0	0.00	
38.48	1158	2.3	46 <i>↓</i>	0.46	CIS 1,3-DCPE
39.44	582	0.0	0	0.00	
39.85	495	0.0	0	0.00	
41.83	402	0.0	0	0.00	
42.60	5578	6.8	136	1.36	<i>NM</i> 1,3 DCPA/PCE - <i>NC</i>
43.06	821	0.0	0	0.00	
43.71	1984	4.4	87 <i><MCL by AR</i>	0.87	DIBRCLMETHANE
44.29	1126	0.0	0	0.00	
45.67	356075	499.0	9980	99.80	1CL4FBZ (Surr) 100% /
46.22	9743	7.5	149 <i>NC</i>	1.49	CHLORO BENZENE
47.24	764319	5.0	100	1.00	1CL2FBZ (IS)
48.21	4037	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160602.14
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4867s 14
 Acquired : Jun 03, 1996 06:00:24
 Printed : Jun 03, 1996 11:11:57

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
48.76	1459	0.0	0	0.00	
48.98	1080	0.0	0	0.00	
49.41	1656	0.0	0	0.00	
49.81	418	0.0	0	0.00	
50.23	347	6.3	126 <i>cmal by AR</i>	1.26	BROMOFORM
51.10	1654	5.0	100 <i>cmal</i>	1.00	1,1,2,2-PCA
51.71	1949	2.7	54 <i>cmal</i>	0.54	1,2,3-TCPA
52.67	1255	0.0	0	0.00	
52.84	2537	4.2	84 <i>NM</i>	0.84	4-CL TOLUENE
53.06	807	0.0	0	0.00	
53.45	1093	0.0	0	0.00	
55.92	2119	5.5	110 <i>nc</i>	1.10	1,3-DCB
56.43	4691	4.3	85 <i>cmal by AR</i>	0.85	1,4-DCB
57.97	4316	6.4	127 <i>nc</i>	1.27	1,2-DCB
60.63	745	0.0	0	0.00	
61.03	422	14.3	286 <i>NM</i>	2.86	1,2-DBr-3-CPA
63.86	599	0.0	0	0.00	
64.24	4137	8.6	172 <i>NM</i>	1.72	1,2,4-TCB
64.66	28137	9.3	185	1.85	HEXACL BUTADIENE
64.97	2474	0.0	0	0.00	
65.82	4794	10.8	217 <i>nc</i>	2.17	1,2,3-TCB
66.87	584	0.0	0	0.00	

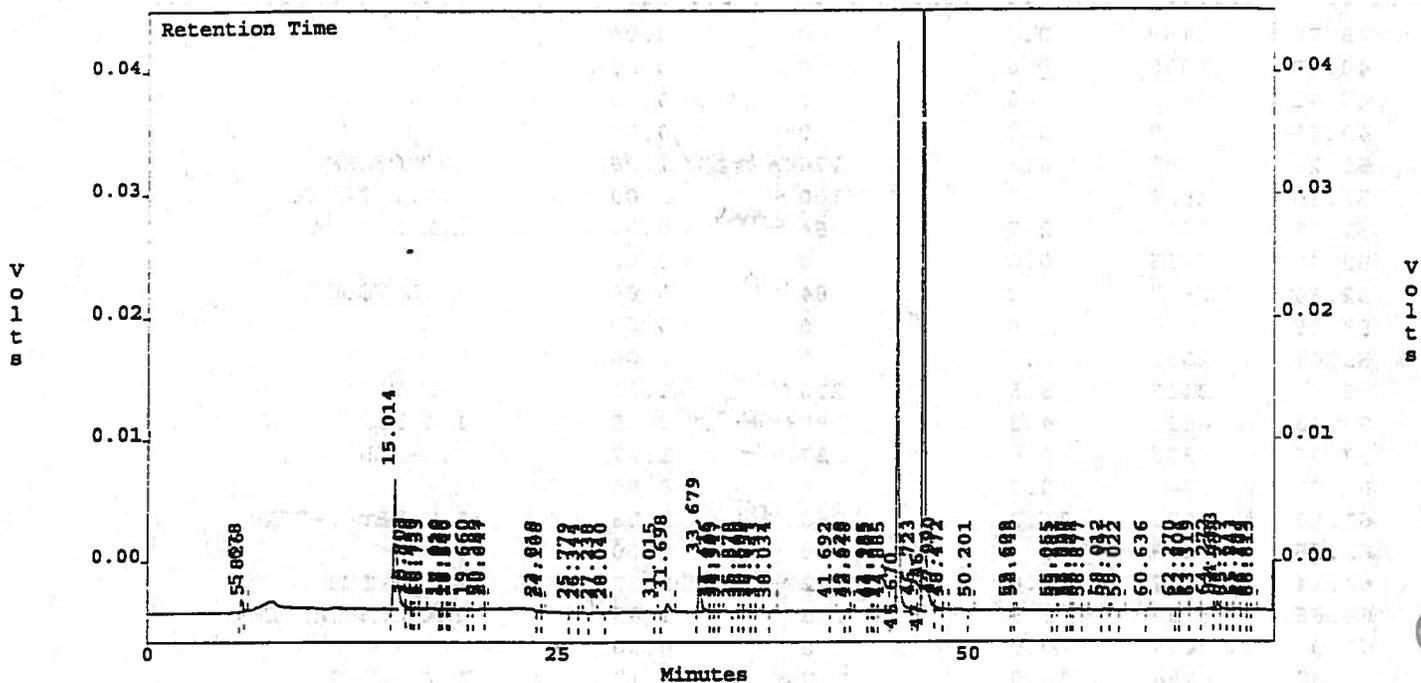
UI 11 Jun 96

AG 13 Jun 96

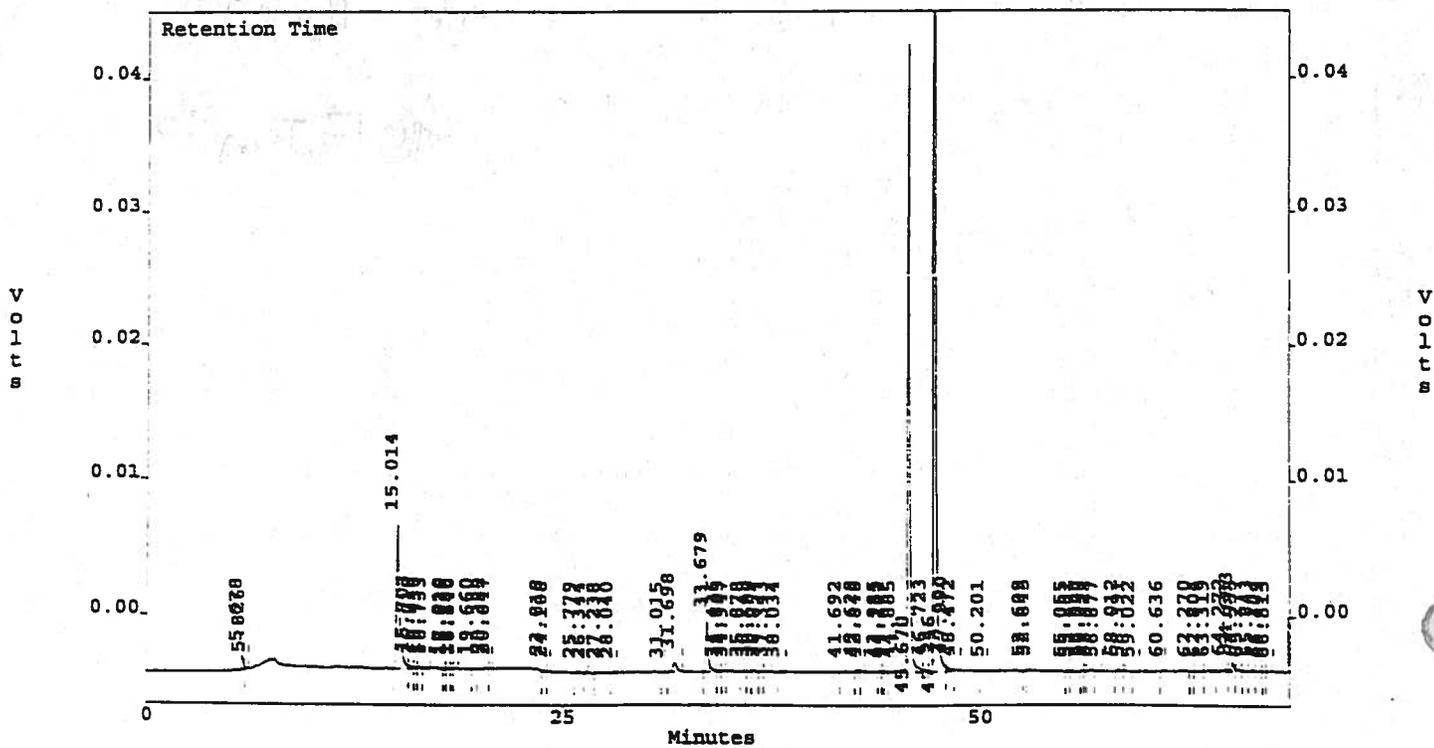
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.15
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 4868s 15
 Acquired : Jun 03, 1996 07:27:19
 Printed : Jun 03, 1996 11:31:31

c:\ezchrom\chrom\160602.15 -- Channel B



c:\ezchrom\chrom\160602.15 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.15
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4868s 15
 Acquired : Jun 03, 1996 07:27:19
 Printed : Jun 03, 1996 11:31:34

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.11	4674	0.0	0	0.00	
6.48	7622	0.0	0	0.00	
11.97	5610	0.0	0	0.00	
31.66	972347	5.0	100	1.00	Flbenzene (IS)
33.61	19397 ✓	6.3	125*	✓1.25	Tce
39.71	4940	2.7	54 <i>LMAL by AR</i>	0.54	Toluene
42.50	2204	2.0	40 <i>LMAL</i>	0.40	Pce
45.62	379381	514.0	10280	102.80	1cl4fbz (surr) 103 %
46.16	3524	2.6	53 <i>NC</i>	0.53	Chlorobenzene
46.41	2874	0.8	16 <i>LMAL</i>	0.16	Ethylbenzene
46.73	6767	3.5	70 <i>LMAL</i>	0.70	M/P Xylene
47.19	964572	5.0	100	1.00	1cl2flbz (IS)
48.58	2341	2.5	51 <i>LMAL by AR</i>	0.51	O Xylene
48.79	2344	2.1	42 <i>LMAL</i>	0.42	Styrene
49.09	8168	0.0	0	0.00	
51.83	2138	2.4	48	0.48	n-propylbenzene
51.98	2015	2.3	47	0.47	Bromobenzene
52.53	6430	3.5	70	0.70	1,3,5-tmb/2-cl tol
52.77	3524	2.3	47	0.47	4-cl toluene
54.16	3857	2.1	41	0.41	1,2,4-tmb
54.89	2933	2.8	56	0.56	s-butylbenzene
55.51	2845	2.7	55	0.55	p-isopropyltoluene
55.87	2930	1.2	24 <i>LMAL</i>	0.24	1,3-dcb
56.38	15981	3.1	62 <i>NC</i>	0.62	1,4-dcb
57.26	2914	2.7	54 <i>LMAL by AR</i>	0.54	n-butylbenzene
57.91	4447	1.5	30 <i>LMAL</i>	0.30	1,2-dcb
63.28	4855	0.0	0	0.00	
64.61	3344	3.1	63 <i>NM</i>	0.63	Hexachlorobutadiene
65.02	2563	1.5	31 <i>LMAL</i>	0.31	Napthalene
65.76	3503	2.8	56 <i>NM</i>	0.56	1,2,3-tcb
66.40	2016	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.15
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : 4868s 15
 Acquired : Jun 03, 1996 07:27:19
 Printed : Jun 03, 1996 11:31:34

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.68	8817	6.1	123	1.23	DCDFM
5.83	1276	0.0	0	0.00	
15.01	150334	0.0	0	0.00	
15.70	3495	0.0	0	0.00	
16.02	786	0.0	0	0.00	
16.43	1474	0.0	0	0.00	
16.73	1473	0.0	0	0.00	
17.91	622	0.0	0	0.00	
18.03	1085	0.0	0	0.00	
18.39	401	0.0	0	0.00	
18.54	668	0.0	0	0.00	
19.66	546	0.0	0	0.00	
20.38	1690	3.5	70	0.70	1,1-DCA
20.65	633	0.0	0	0.00	
23.82	1061	0.0	0	0.00	
24.11	502	0.0	0	0.00	
25.78	1442	1.3	26	0.26	CHLOROFORM
26.34	566	0.0	0	0.00	
27.24	1096	0.0	0	0.00	
28.04	894	1.9	39	0.39	1,1,1-TCA
31.02	298	0.0	0	0.00	
31.70	11441	0.0	0	0.00	
33.68	41636	7.0	140	1.40	TCE
34.44	554	0.0	0	0.00	
34.70	848	2.1	41	0.41	1,2-DCEP
34.95	449	0.0	0	0.00	
35.88	847	3.8	76	0.76	BRDICLMETHANE
36.25	468	0.0	0	0.00	
36.50	1381	0.0	0	0.00	
36.85	636	0.0	0	0.00	
37.34	862	0.0	0	0.00	
38.03	1419	0.0	0	0.00	
41.69	635	0.0	0	0.00	
42.63	1890	6.5	130	1.30	1,3 DCPA/PCE - NC
42.85	722	0.0	0	0.00	
43.98	786	0.0	0	0.00	
44.13	368	0.0	0	0.00	
44.31	469	6.1	122	1.22	1,2-DBEA (EDB)
44.88	1959	0.0	0	0.00	
45.67	384982	511.3	10226	102.26	1CL4FBZ (SURR) 102.1
46.72	3234	0.0	0	0.00	
47.25	805895	5.0	100	1.00	1CL2FBZ (IS)
47.99	5256	0.0	0	0.00	
48.47	1508	0.0	0	0.00	
50.20	650	6.4	128	1.28	BROMOFORM

Continued...

File : c:\ezchrom\chrom\160602.15
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : 4868s 15
 Acquired : Jun 03, 1996 07:27:19
 Printed : Jun 03, 1996 11:31:34

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
52.61	600	4.2	84 NC	0.84	2-CL TOLUENE
52.85	655	3.8	76 NC	0.76	4-CL TOLUENE
55.06	923	0.0	0	0.00	
55.28	288	0.0	0	0.00	
55.93	672	5.3	106 NC	1.06	1,3-DCB
56.10	430	0.0	0	0.00	
56.42	1730	3.9	78 ^{small by} AR	0.78	1,4-DCB
56.88	865	0.0	0	0.00	
58.01	2301	6.1	121 NC	1.21	1,2-DCB
58.39	259	0.0	0	0.00	
59.02	813	0.0	0	0.00	
60.64	583	0.0	0	0.00	
62.27	370	0.0	0	0.00	
62.80	1327	0.0	0	0.00	
63.32	2665	0.0	0	0.00	
64.27	3962	8.5	171 NC	1.71	1,2,4-TCB
64.68	7442	6.5	130 NM	1.30	HEXACHLOROCYCLOHEPTADIENE
64.93	2752	0.0	0	0.00	
65.28	1594	0.0	0	0.00	
65.84	1546	10.2	205 ↓	2.05	1,2,3-TCB
66.32	643	0.0	0	0.00	
66.49	273	0.0	0	0.00	
66.81	649	0.0	0	0.00	

* Possible sparger carryover.

UI 11 Jun 96

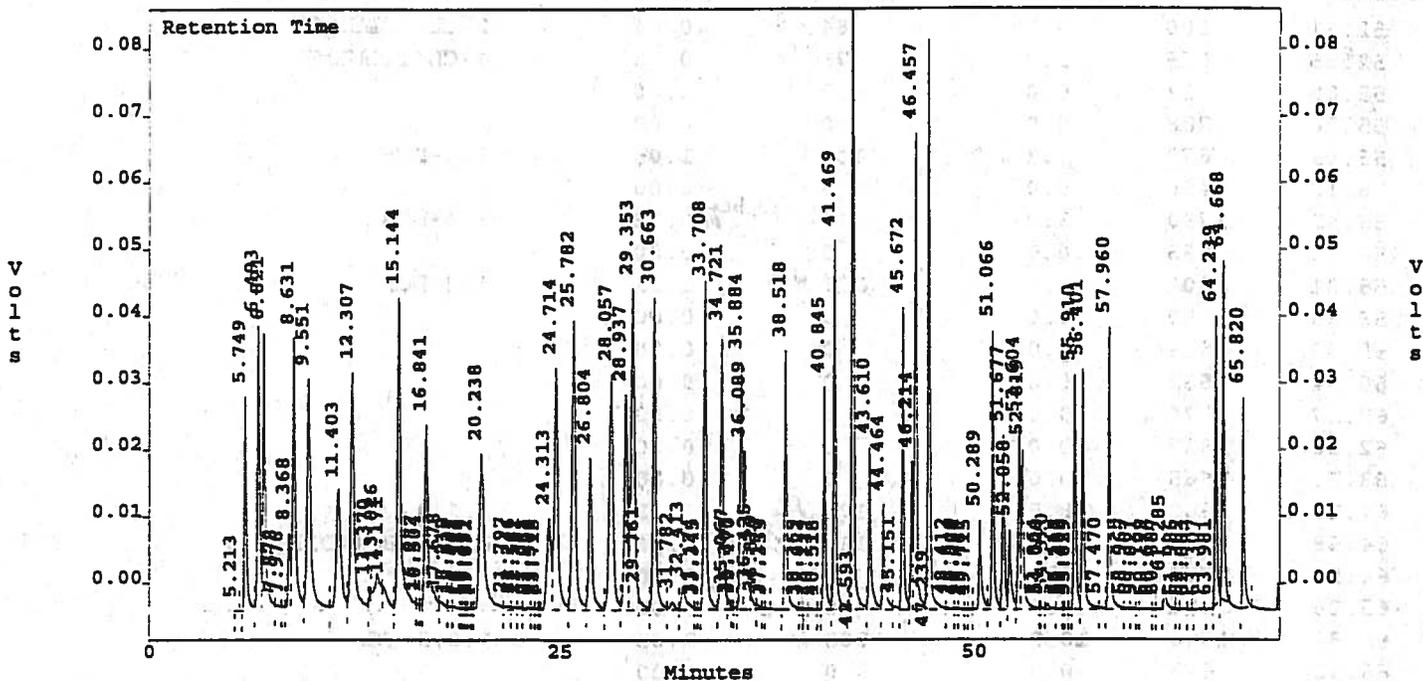
Reported as water w/100x dilution, to match other MeOH extracts.

4/13 Jun 96

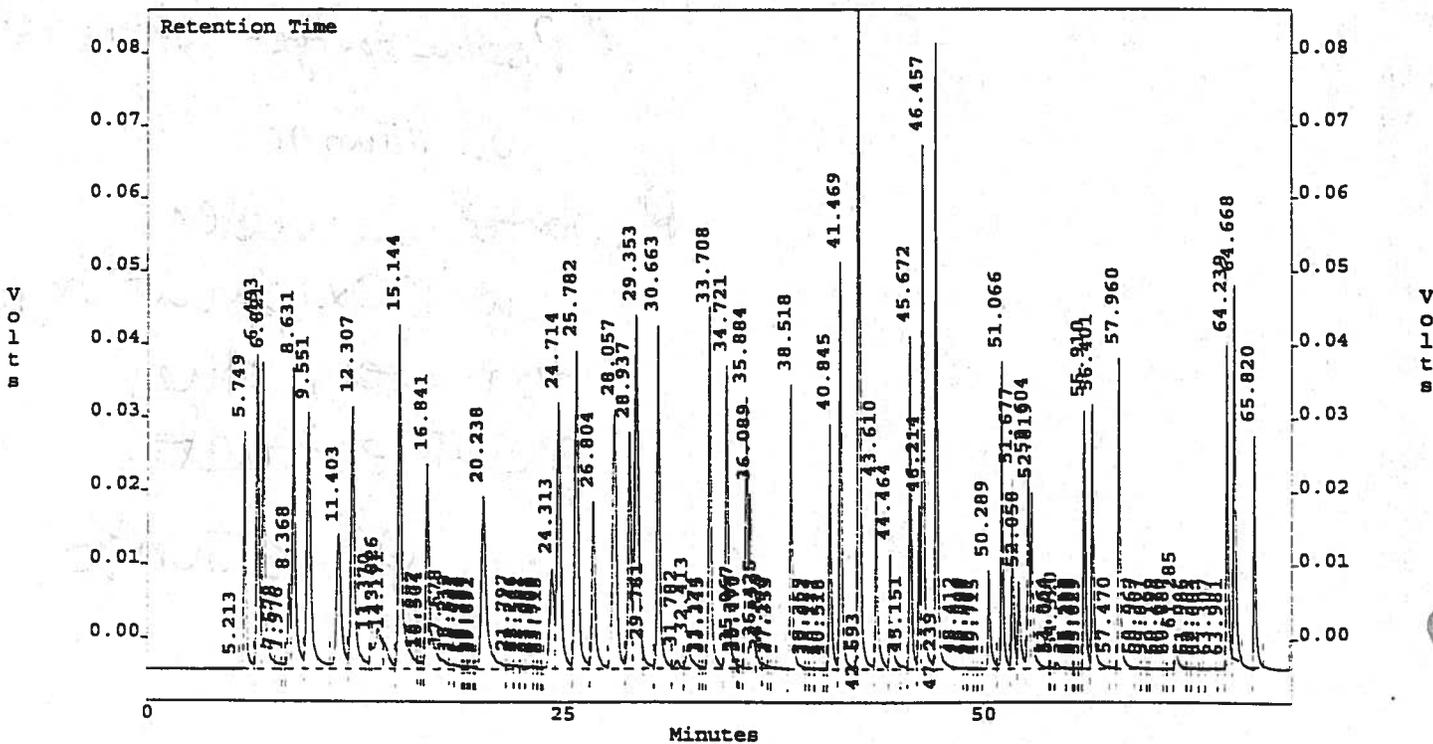
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.16
Method : c:\ezchrom\chrom\1voa0527.met
Sample ID : CHK VOA 16
Acquired : Jun 03, 1996 08:56:41
Printed : Jun 03, 1996 11:31:52

c:\ezchrom\chrom\160602.16 -- Channel B



c:\ezchrom\chrom\160602.16 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.16
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : CHK VOA 16
 Acquired : Jun 03, 1996 08:56:41
 Printed : Jun 03, 1996 11:31:55

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
6.16	4371	0.0	0	0.00	
6.56	2688	0.0	0	0.00	
6.76	34063	47.5	951	9.51	Vinyl Chloride
9.68	2665	0.0	0	0.00	
12.21	92657	49.7	994	9.94	1,1-dce
13.79	2958	0.0	0	0.00	
15.05	2626	0.0	0	0.00	
16.06	76629	48.4	967	9.67	Mtbe
16.76	186880	49.4	989	9.89	Trans 1,2-dce
24.68	170473	47.5	951	9.51	Cis 1,2-dce
28.05	2605	0.0	0	0.00	
28.90	140847	51.1	1021	10.21	1,1-dcpe
30.43	366585	47.7	955	9.55	Benzene
31.71	966927	5.0	100	1.00	Flbenzene (IS)
33.64	202386	48.5	970	9.70	Tce
38.45	73028	47.1	942	9.42	Cis 1,3-dcpe
39.72	347812	48.0	959	9.59	Toluene
40.79	94857	45.8	916	9.16	Trans 1,3-dcpe
42.50	170236	48.8	976	9.76	Pce
45.61	360523	486.8	9735	97.35	1cl4fbz (surr) 9 7
46.15	363788	48.3	965	9.65	Chlorobenzene
46.40	331644	50.8	1015	10.15	Ethylbenzene
46.73	746591	99.1	1982	19.82	M/P Xylene
47.18	970162	5.0	100	1.00	1cl2flbz (IS)
48.58	306637	48.9	978	9.78	O Xylene
48.78	350245	41.6	832	8.32	Styrene
50.13	260761	49.0	979	9.79	Isopropylbenzene
51.83	282206	48.4	969	9.69	n-propylbenzene
51.98	396543	49.2	985	9.85	Bromobenzene
52.53	766472	99.7	1994	19.94	1,3,5-tmb/2-cl tol
52.76	363463	49.2	985	9.85	4-cl toluene
53.60	2890	0.0	0	0.00	
54.00	223972	48.8	976	9.76	t-butylbenzene
54.16	343643	49.2	984	9.84	1,2,4-tmb
54.58	2532	0.0	0	0.00	
54.90	248924	48.3	966	9.66	s-butylbenzene
55.50	251792	48.4	969	9.69	p-isopropyltoluene
55.86	314608	49.3	986	9.86	1,3-dcb
56.34	308610	48.6	972	9.72	1,4-dcb
56.90	2086	0.0	0	0.00	
57.25	263023	47.7	954	9.54	n-butylbenzene
57.90	262255	50.3	1007	10.07	1,2-dcb
64.19	168171	53.9	1079	10.79	1,2,4-tcb
64.61	133935	59.3	1185	11.85 *	Hexachlorobutadiene
65.01	217559	50.2	1004	10.04	Napthalene

Continued...

File .. : c:\ezchrom\chrom\160602.16
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : CHK VOA 16
 Acquired : Jun 03, 1996 08:56:41
 Printed : Jun 03, 1996 11:31:55

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
65.76	158538	56.8	1135	11.35	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160602.16
Method : c:\ezchrom\chrom\1voa0527.met
Sample ID : CHK VOA 16
Acquired : Jun 03, 1996 08:56:41
Printed : Jun 03, 1996 11:31:55

Channel B Results

Table with 6 columns: RT(min), pK Area, ng, Soil (µg/kg), Soln(µg/l), Compound. Lists various chemical compounds and their concentrations in soil and solution.

Continued...

File : c:\ezchrom\chrom\160602.16
 Method : c:\ezchrom\chrom\1voa0527.met
 Sample ID : CHK VOA 16
 Acquired : Jun 03, 1996 08:56:41
 Printed : Jun 03, 1996 11:31:55

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
33.17	2563	0.0	0	0.00	
33.34	1662	0.0	0	0.00	
33.71	544994	46.7	935	9.35	TCE
34.72	449711	52.2	1045	10.45	1,2-DCPA
35.07	15322	0.0	0	0.00	
35.31	2774	0.0	0	0.00	
35.47	3675	0.0	0	0.00	
35.88	368248	55.3	1107	11.07	BRDCLMETHANE
36.09	286274	53.3	1065	10.65	DIBROMOMETHANE
36.42	26748	0.0	0	0.00	
36.83	8621	0.0	0	0.00	
37.17	1610	0.0	0	0.00	
37.36	1100	0.0	0	0.00	
38.52	360891	46.3	926	9.26	CIS 1,3-DCPE
39.37	2276	0.0	0	0.00	
39.62	2225	0.0	0	0.00	
40.14	2249	0.0	0	0.00	
40.52	434	0.0	0	0.00	
40.84	294109	48.0	960	9.60	TRANS 1,3-DCPE
41.47	539268	51.4	1029	10.29	1,1,2-TCA
42.59	1052115	96.8	1936	19.36	1,3 DCPA/PCE
43.61	248663	50.2	1003	10.03	DIBRCLMETHANE
44.46	173885	46.4	929	9.29	1,2-DBEA (EDB)
45.15	9165	0.0	0	0.00	
45.67	382808	550.1	11003	110.03	1CL4FBZ (SURR) " 0
46.21	166853	41.2	823	8.23	OK CTC CHLOROBENZENE
46.46	705450	60.9	1217	12.17	OK CTC 1,1,1,2-PCA
47.24	743362	5.0	100	1.00	1CL2FBZ (IS)
48.41	5540	0.0	0	0.00	
48.94	2113	0.0	0	0.00	
49.08	2443	0.0	0	0.00	
49.47	647	0.0	0	0.00	
49.72	968	0.0	0	0.00	
50.29	136261	49.7	994	9.94	BROMOFORM
51.07	344901	50.5	1010	10.10	1,1,2,2-PCA
51.68	230945	48.0	960	9.60	1,2,3-TCPA
52.06	126880	49.2	983	9.83	BROMOBENZENE
52.60	220117	59.8	1196	11.96	OK CTC 2-CL TOLUENE
52.82	230633	51.3	1026	10.26	4-CL TOLUENE
53.86	1031	0.0	0	0.00	
54.03	2501	0.0	0	0.00	
54.32	13293	0.0	0	0.00	
55.11	2442	0.0	0	0.00	
55.28	537	0.0	0	0.00	
55.40	861	0.0	0	0.00	
55.63	505	0.0	0	0.00	
55.91	308388	49.9	998	9.98	1,3-DCB

Continued...

File : c:\ezchrom\chrom\160602.16
 Method : c:\ezchrom\chrom\lvoa0527.met
 Sample ID : CHK VOA 16
 Acquired : Jun 03, 1996 08:56:41
 Printed : Jun 03, 1996 11:31:56

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
56.40	331007	45.7	913	9.13	1,4-DCB
57.47	4697	0.0	0	0.00	
57.96	369978	59.2	1184	11.84 <i>OK CTC</i>	1,2-DCB
58.97	3770	0.0	0	0.00	
59.31	2250	0.0	0	0.00	
59.62	771	0.0	0	0.00	
60.20	3037	0.0	0	0.00	
60.62	465	0.0	0	0.00	
60.89	1520	0.0	0	0.00	
61.29	39444	46.7	934	9.34	1,2-DBr-3-CPA
61.99	1291	0.0	0	0.00	
62.36	1526	0.0	0	0.00	
62.66	516	0.0	0	0.00	
63.31	1632	0.0	0	0.00	
63.98	1090	0.0	0	0.00	
64.24	302527	62.4	1247	12.47 <i>OK CTC</i>	1,2,4-TCB
64.67	401568	59.5	1190	11.90 *	HEXACL BUTADIENE
65.82	247866	57.3	1146	11.46	1,2,3-TCB

*out of $\pm 15\%$ range, not reported for the day

03 Jun 96 CT

AB 10 Jun 96

ABBREVIATIONS

Addl Cmpds	Additional compounds
a.r.	Area Ratio = area of compound / area of I.S.
BS/BSD	Blank spike/Blank spike duplicate
CHK	Check
CHK VOA	Secondary Source Volatile Standard
COC	Chain of Custody
CTL	Control
CTL VOA	Primary Source Volatile Standard
DCM	Methylene Chloride (Dichloromethane)
FB	Fluorobenzene response on Hall detector
H-ok	Hall response for this compound is acceptable to use
Int	Integration (poor integration)
I.S.	Internal Standard
jk pk	Junk peak
KD	Kuderna-Danish: glassware setup
MDL	Minimum Detection Limit
MeCl ₂	Methylene Chloride
MeOH	Methanol
MRL	Minimum Reporting Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
Mthd Blk	Method Blank
N-Evap	Micro-evaporation apparatus
N/A or NA	Not applicable
NC	Not confirmed (either on the other column or other detector)
ND	Not detected
NM	Non method
No-H	No Hall response for this compound
NOO	Not on original
NOR	Not on repeat
NP	Not printed
OOC	Out of Control Event Form
PK	Peak
pk shp	peak shape (bad peak shape)
RRT	Relative Retention Time (incorrect relative retention time)
RT	Retention Time
Spk	Spike
Std dev	Standard deviation
UNK	Unknown
Use PID	Report the compound from the PID detector
WIL	Within Limits

ERROR CODES

<u>Error Code</u>	<u>Explanation of Correction</u>
A	Primary Data Incorrectly Recorded
T	Transcription Error
E	Entry Error
D	Date/Time Incorrectly Recorded
P	Peak Height Incorrectly Measured
SC	Standard Curve Misread
C	Calculation Error
SF	Significant Figures Incorrect
R	Rounding Error
W	Write-over
I	Illegible Data
SP	Spelling Error
AE	Automated Entry Error
EC	Entry Completed

VOLATILE STANDARDS PREPARATION LOG

STANDARD NAME: ESW 0523PREPARATION DATE: 23 May 96NO. OF VIALS: 20PREPARED BY: JTFINAL VOLUME: 50mlsSOLVENT: MeOHTYPE: External Surrogate

MIX/COMPOUND	SUPPLIER	DATE REC'D	LOT #	MIX CONC (ug/ml)	VOL USED (ul)	WEIGHT USED (g)	FINAL CONC (ug/ml)
1-chloro-4-fluoro benzene	Reste k	15 Mar 96	A006130	2500 ug/ml	400	N/A	20.0
JT 23 May 96							

USE/COMMENTS:

To be used in all water samples.

VOLATILE STANDARDS PREPARATION LOGSTANDARD NAME: IS 0523PREPARATION DATE: 23 May 96NO. OF VIALS: 30PREPARED BY: CIFINAL VOLUME: 100 mlSOLVENT: MeOHTYPE: Internal standard surrogate

MIX/COMPOUND	SUPPLIER	DATE REC'D	LOT #	MIX CONC (ug/ml)	VOL USED (ul)	WEIGHT USED (g)	FINAL CONC (ug/ml)
Fluorobenzene Mix	Restek	14 May 96	A006057	2000	2000	NA	40.0
502.2 Int. Std. Mix	Restek	14 May 96	A006922	2000	2000	NA	40.0
Fluorobenzene							

* @ 23 May 96

23 May 96 CI

USE/COMMENTS:

Daily internal standard surrogate

VOLATILE STANDARDS PREPARATION LOG

STANDARD NAME: VOAPOS23

PREPARATION DATE: 23 may 96

NO. OF VIALS: 11

PREPARED BY: CT

FINAL VOLUME: 100mls

SOLVENT: MeOH

TYPE: Primary Standard

MIX/COMPOUND	SUPPLIER	DATE REC'D	LOT #	MIX CONC (ug/ml)	VOL USED (ul)	WEIGHT USED (g)	FINAL CONC (ug/ml)
502.2 Calib. mix #1	Restek	14 May 96	A006522	2000	500	N/A	10.0
#2		17 May 96	A006524				
#3		17 May 96	A006096				
#4		17 May 96	A006058				
#5		17 May 96	A006525				
#6		14 Feb 96	A005576				
2-ethylvinylcyclohexane	Supelco	14 May 96	#4 L433856	5000	200		
MTBE	absolute standards	16 Apr 96	14-395	1000	1000		
Freon 113			032996	1000	1000		
1-chloro-4-fluoro-benzene	Restek	13 May 96	A006150	2500	800		20.0
CT 23 May 96							

© CT 23 May 96
* no receiptal date

USE/COMMENTS:
Calibration and daily STL VOA standard

VOLATILE STANDARDS PREPARATION LOG

STANDARD NAME: VOAS0523PREPARATION DATE: 23 MAY 96NO. OF VIALS: 11PREPARED BY: UTFINAL VOLUME: 100 mlSOLVENT: MeOHTYPE: Secondary Standard

MIX/COMPOUND	SUPPLIER	DATE REC'D	LOT #	MIX CONC (ug/ml)	VOL USED (ul)	WEIGHT USED (g)	FINAL CONC (ug/ml)
VOA MIX 100	NSI	15 Apr 96	C-137-03	2000	500	NA	10.0
VOA MIX 200		15 Apr 96	C-134-01	↓	500		
VOA MIX 300A		12 Mar 96	C-137-02	1000	1000		
VOA MIX 300B		12 Mar 96	C-135-01	↓	1000		
VOA mix 400		15 Apr 96	C-140-01	2000	500		
VOA mix 500		15 Apr 96	C-133-01	↓	500		
VOA MIX 600		15 Apr 96	C-138-01	↓	500		
2-chloroethylvinylether	↓	12 Apr 96	17-04-01	1000	1000		
MTBE	chem service	15 MAR 96	156-146B	2000	500		
Freon 113	↓	26 Jul 95	144-50A	20000	50		↓
1-chloro-4-fluoro benzene	Restek	15 MAR 96	ADW130	2500	800	↓	20.0

UT
23 MAY 96

USE/COMMENTS:

Daily CHE standard

Volatiles Instrument 1 Run Log

CTL STD VOAPOS23-1 10.0ppb
 CHK STD VOAS0523-1
 Mix Spk CTL STD
 INT STD ES0523-1 40.0ppb
 EXT SURR ESW0523-1 20.0ppb

Analyst TH Date 27 May 96
 Printed UI Date 29 May 96
 Onto Network UT Date 30 May 96
 Method Used 1VOA0527.MET
 Batch Used 0527I.Seg

*TH @ 27 May 96

Data File Number	SP#	Sample ID	Aliquot	Client ID	Method	Comments	Final pH
16-0527-01	1	CHK BIK	5.0ml		All	didn't process or print	
02	2	0.4 ppb	20ul			<div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">}</div> <div> dil to X10 IVOA0527.MET </div> </div>	
03	3	0.5 ppb	25ul				
04	4	1.0 ppb	5.0ul				
05	5	5.0 ppb	25ul				
06	6	10.0 ppb	5.0ul				
07	7	25.0 ppb	12.5ul				
08	8	50.0 ppb	25.0ul				
09	9	CHK BIK	5.0ml		✓		
10	10	2.0 ppb	10.0ul			✓ x10 dil DCM Contam.	
11	11	MTHD BIK	5.0ml			✓ DCM Contam.	
12	12	CHK VOA	5.0ml		↓	✓	
13	13	4850	5.0ml	FB-29	500.2(5)	✓	←2
14	14	4960	5ul	Air-3-I-83	↓	✓	←
		4875		21.38 88 +	Air		←
15	15	4961	↓	Air-3-B-83	↓	✓	←
		4875		21.38 83 +	↓		←
16	16	4962	↓	Air-3-T-83	500.2(5)	✓	←
		4877		21.38 83 +			←
17	1	CTV OA	5.0ul		All	✓	←
18	2	0.4 ppb	20ul		All	} read off IVOA0527.MET	
19	3	0.5 ppb	2.5ul		↓		
TH 27 May 96							

INTERNAL STANDARD WORKSHEET

METHOD: All Volatiles
 DATE: 27 May 96 ✓

INSTRUMENT: 1 ✓
 OPERATOR: UI/CT/MM/TDF

STANDARD CONC. (ppb)	PID DETECTOR FLUOROENZENE	PID DETECTOR 1-CHLORO-2-FLUROENZENE	HALL (ELCD) DETECTOR 1-CHLORO-2-FLUROENZENE
	RESPONSE AREA	RESPONSE AREA	RESPONSE AREA
<u>0.4</u> ✓	<u>1062336</u> ✓	<u>1039170</u> ✓	<u>773186</u> ✓
<u>0.5</u> ✓	<u>1050155</u> ✓	<u>1032046</u> ✓	<u>848689</u> ✓
<u>1.0</u> ✓	<u>1107814</u> ✓	<u>1091063</u> ✓	<u>890777</u> ✓
<u>5.0</u> ✓	<u>1087288</u> ✓	<u>1078086</u> ✓	<u>873477</u> ✓
<u>10.0</u> ✓	<u>1136074</u> ✓	<u>1142026</u> ✓	<u>981342</u> ✓
<u>25.0</u> ✓	<u>1083021</u> ✓	<u>1122392</u> ✓	<u>896191</u> ✓
<u>50.0</u> ✓	<u>1079972</u> ✓	<u>1181182</u> ✓	<u>954382</u> ✓
MEAN	<u>1086666</u> ✓	<u>1097995</u> ✓	<u>888292</u> ✓
UPPER LIMIT (130%)	<u>1412666</u> ✓	<u>1427394</u> ✓	<u>1154780</u> ✓
LOWER LIMIT (70%)	<u>760666</u> ✓	<u>768597</u> ✓	<u>621804</u> ✓

Comments:

HC 31 May 96

Initials TDF Date 30 May 96

OUT OF CONTROL EVENT FORM

Date of Event: 27 May 96, E1

Method: 502.2 specific compounds in air

Analyst: LT

Out of Control event (check all that apply)	Analyte	% Recovered	Acceptable Range
RPD outside of criteria			
BS/BSD outside of criteria			
MS/MSD outside of criteria			
Surrogate outside of criteria			
Calibration Verification outside of range			
Incorrect amount of Surrogate or spike added			Sample lost in lab accident
Contract requirements not met	✓		Repeat analyzed past holding time
Insufficient number QC samples run			Instrument failure during analysis
Reagents/Standards expired			Laboratory contamination
Missed holding time			Suspected glassware contamination
Method blank result greater than MRL			Sample result too high to see spike
Lab contaminated trip blanks			
Matrix Interference			

Samples affected
526-4940-62

For additional OOC or corrective action use back of page.

Corrective Action not successful successful not applicable

samples reported past holding time.

06 Jun 96 LT

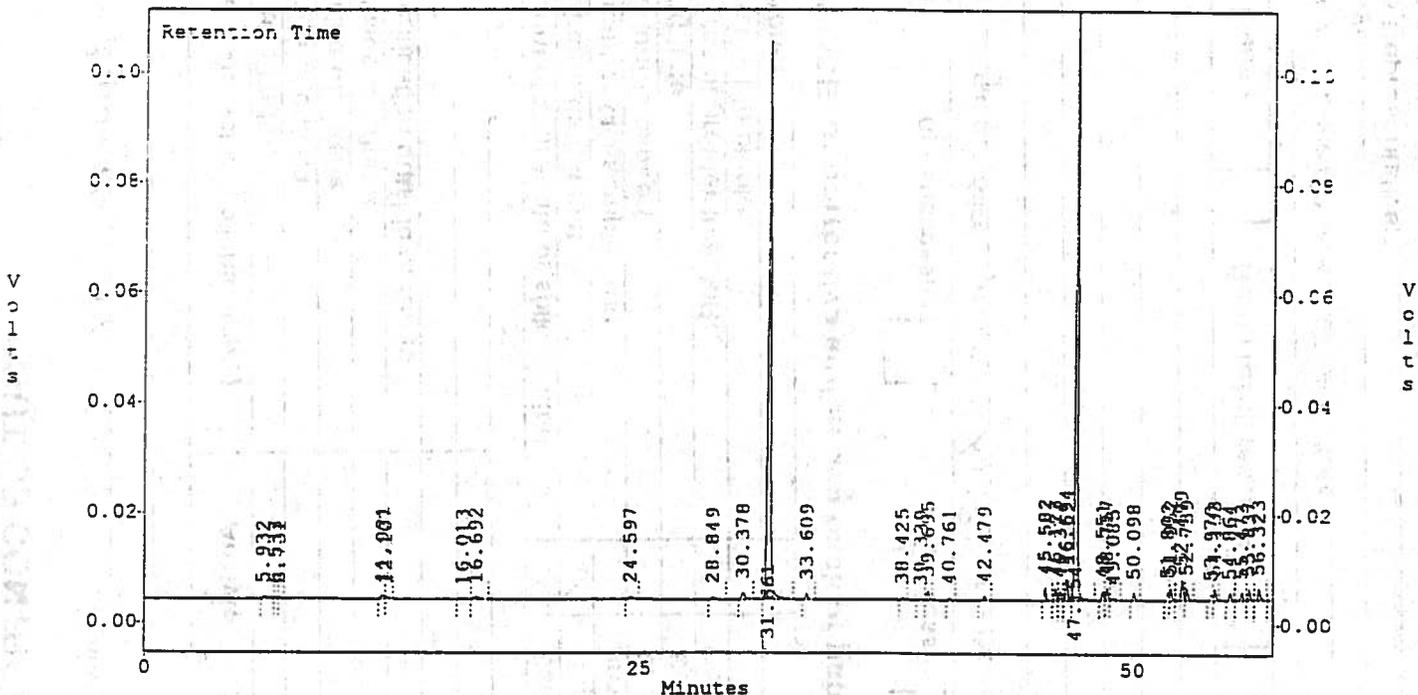
<input checked="" type="checkbox"/> Report to be flagged	<input type="checkbox"/> Rerun result reported	<input type="checkbox"/> Client has been notified	<input checked="" type="checkbox"/> Original results reported
--	--	---	---

Form Completed By: <u>Garnit Turner</u>	Date: <u>06 Jun 96</u>
Laboratory Manager: _____	Date: _____
Quality Assurance Representative: _____	Date: _____

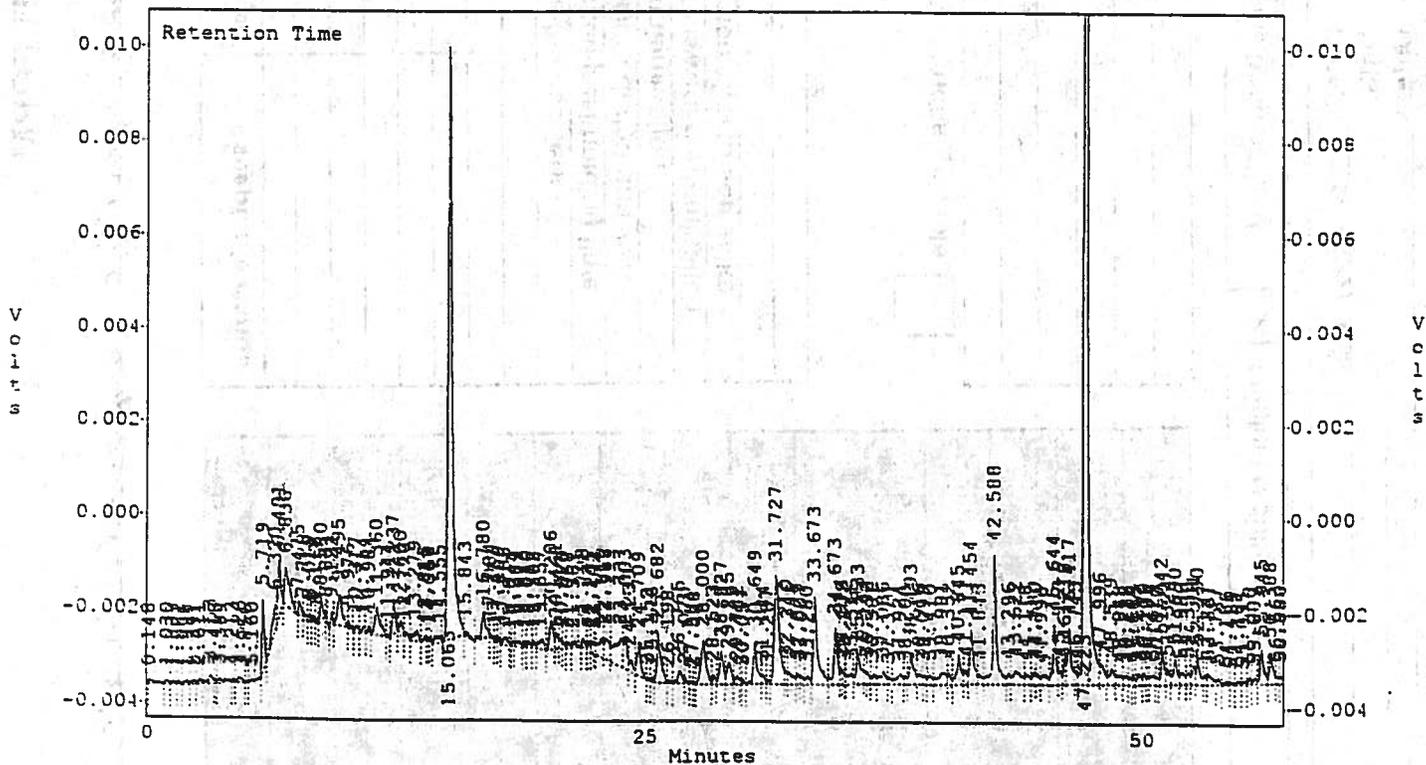
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.18
Method : c:\ezchrom\voatemp\lvoa0527.met
Sample ID : 0.4 ppb 2
Acquired : May 28, 1996 14:42:32
Printed : May 29, 1996 16:02:26

c:\ezchrom\voatemp\160527.18 -- Channel A



c:\ezchrom\voatemp\160527.18 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.18
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.4 ppb 2
 Acquired : May 28, 1996 14:42:32
 Printed : May 29, 1996 16:02:28

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.93	9753	0.0	0	0.00	
6.53	2359	0.0	0	0.00	
6.73	2698	2.0	40	0.40	Vinyl Chloride
11.92	7976	0.0	0	0.00	
12.11	3261	2.0	40	0.40	1,1-dce
16.01	2744	2.0	40	0.40	Mtbe
16.69	7256	2.0	40	0.40	Trans 1,2-dce
24.60	5909	2.0	40	0.40	Cis 1,2-dce
28.85	4762	2.0	40	0.40	1,1-dcpe
30.38	13697	2.0	40	0.40	Benzene
31.66	1062336	5.0	100	1.00	Flbenzene (IS)
33.61	10456	2.0	40	0.40	Tce
38.43	2492	2.0	40	0.40	Cis 1,3-dcpe
39.34	2323	0.0	0	0.00	
39.69	14066	2.0	40	0.40	Toluene
40.76	3254	2.0	40	0.40	Trans 1,3-dcpe
42.48	6865	2.0	40	0.40	Pce
45.58	15042	20.0	400	4.00	1cl4fbz (surr)
46.12	13605	2.0	40	0.40	Chlorobenzene
46.37	11941	2.0	40	0.40	Ethylbenzene
46.69	28023	4.0	80	0.80	M/P Xylene
47.15	1039170	5.0	100	1.00	1cl2flbz (IS)
48.55	11475	2.0	40	0.40	O Xylene
48.76	15030	2.0	40	0.40	Styrene
49.08	4162	0.0	0	0.00	
50.10	9921	2.0	40	0.40	Isopropylbenzene
51.80	10580	2.0	40	0.40	n-propylbenzene
51.95	14879	2.0	40	0.40	Bromobenzene
52.50	29637	4.0	80	0.80	1,3,5-tmb/2-cl tol
52.74	14233	2.0	40	0.40	4-cl toluene
53.97	9005	2.0	40	0.40	t-butylbenzene
54.13	14355	2.0	40	0.40	1,2,4-tmb
54.86	9899	2.0	40	0.40	s-butylbenzene
55.47	10253	2.0	40	0.40	p-isopropyltoluene
55.84	12802	2.0	40	0.40	1,3-dcb
56.32	16831	2.0	40	0.40	1,4-dcb
57.22	11712	2.0	40	0.40	n-butylbenzene
57.87	13152	2.0	40	0.40	1,2-dcb
60.13	3845	0.0	0	0.00	
64.15	6891	2.0	40	0.40	1,2,4-tcb
64.57	6564	2.0	40	0.40	Hexachlorobutadiene
64.98	9587	2.0	40	0.40	Napthalene
65.73	8272	2.0	40	0.40	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.18
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.4 ppb 2
 Acquired : May 28, 1996 14:42:32
 Printed : May 29, 1996 16:02:29

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Scin(µg/l)	Compound
0.15	1025	0.0	0	0.00	
1.03	944	0.0	0	0.00	
1.33	784	0.0	0	0.00	
1.58	825	0.0	0	0.00	
2.00	1282	0.0	0	0.00	
2.39	1215	0.0	0	0.00	
2.61	1358	0.0	0	0.00	
3.15	3192	0.0	0	0.00	
3.42	666	0.0	0	0.00	
3.58	1322	0.0	0	0.00	
4.21	552	0.0	0	0.00	
4.53	1768	0.0	0	0.00	
4.86	293	0.0	0	0.00	
5.16	638	0.0	0	0.00	
5.72	12086	2.0	40	0.40	DCDFM
6.32	6584	2.0	40	0.40	CHLOROMETHANE
6.49	12393	0.0	0	0.00	
6.84	13661	2.0	40	0.40	VINYL CHLORIDE
7.47	2323	0.0	0	0.00	
7.73	862	0.0	0	0.00	
8.02	912	0.0	0	0.00	
8.18	912	0.0	0	0.00	
8.33	329	2.0	40	0.40	BROMOMETHANE
8.58	4385	2.0	40	0.40	CHLOROETHANE
8.85	502	0.0	0	0.00	
9.12	1835	0.0	0	0.00	
9.49	10885	2.0	40	0.40	TCFM
9.98	1271	0.0	0	0.00	
10.32	1753	0.0	0	0.00	
10.71	1174	0.0	0	0.00	
10.98	1037	0.0	0	0.00	
11.36	10924	2.0	40	0.40	FREON 113
11.94	475	0.0	0	0.00	
12.24	7164	2.0	40	0.40	1,1-DCE
12.60	2610	0.0	0	0.00	
12.78	1141	0.0	0	0.00	
13.28	4008	0.0	0	0.00	
13.81	860	0.0	0	0.00	
13.96	266	0.0	0	0.00	
14.07	273	0.0	0	0.00	
14.56	3078	0.0	0	0.00	
15.06	178654	2.0	40	0.40	METH CHLORIDE
15.84	1783	0.0	0	0.00	
16.78	8209	2.0	40	0.40	TRANS 1,2-DCE
17.08	764	0.0	0	0.00	
17.32	756	0.0	0	0.00	
17.51	1134	0.0	0	0.00	
17.78	2933	0.0	0	0.00	
18.07	506	0.0	0	0.00	
18.25	986	0.0	0	0.00	
18.39	2295	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.18
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.4 ppb 2
 Acquired : May 28, 1996 14:42:32
 Printed : May 29, 1996 16:02:29

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln(µg/l)	Compound
18.84	1114	0.0	0	0.00	
19.02	1776	0.0	0	0.00	
19.30	1541	0.0	0	0.00	
19.66	4383	0.0	0	0.00	
20.21	9555	2.0	40	0.40	1,1-DCA
20.46	3818	0.0	0	0.00	
20.68	1841	0.0	0	0.00	
20.82	983	0.0	0	0.00	
21.07	1445	0.0	0	0.00	
21.36	1624	0.0	0	0.00	
21.80	2425	0.0	0	0.00	
22.13	1902	0.0	0	0.00	
22.29	1677	0.0	0	0.00	
22.40	1401	0.0	0	0.00	
22.81	7717	0.0	0	0.00	
22.99	8102	0.0	0	0.00	
23.74	16877	0.0	0	0.00	
24.00	8440	0.0	0	0.00	
24.24	3407	2.0	40	0.40	2,2-DCPA
24.71	9437	2.0	40	0.40	CIS 1,2-DCE
25.15	395	0.0	0	0.00	
25.38	772	0.0	0	0.00	
25.68	14528	2.0	40	0.40	CHLOROFORM
26.20	907	0.0	0	0.00	
26.77	4615	2.0	40	0.40	BCM
27.07	1023	0.0	0	0.00	
27.38	654	0.0	0	0.00	
27.53	345	0.0	0	0.00	
28.00	17310	2.0	40	0.40	1,1,1-TCA
28.52	2024	0.0	0	0.00	
28.93	9614	2.0	40	0.40	1,1-DCPE
29.28	7418	2.0	40	0.40	CARBON TET
29.74	2620	0.0	0	0.00	
29.91	709	0.0	0	0.00	
30.06	793	0.0	0	0.00	
30.65	12677	2.0	40	0.40	1,2-DCA
31.04	2248	0.0	0	0.00	
31.29	999	0.0	0	0.00	
31.73	41380	0.0	0	0.00	
32.21	2571	0.0	0	0.00	
32.35	5090	2.0	40	0.40	2-CL ETH VI ETH
32.83	2188	0.0	0	0.00	
33.01	2081	0.0	0	0.00	
33.28	2883	0.0	0	0.00	
33.67	27791	2.0	40	0.40	TCE
34.67	16111	2.0	40	0.40	1,2-DCPA
34.97	2459	0.0	0	0.00	
35.08	1651	0.0	0	0.00	
35.20	1005	0.0	0	0.00	
35.51	4201	0.0	0	0.00	
35.83	10719	2.0	40	0.40	BRDICLMETHANE
36.14	2346	2.0	40	0.40	DIBROMOMETHANE
36.29	2354	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.18
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.4 ppb 2
 Acquired : May 28, 1996 14:42:32
 Printed : May 29, 1996 16:02:29

Channel B Results

RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
36.58	3537	0.0	0	0.00	
37.09	5791	0.0	0	0.00	
37.37	1807	0.0	0	0.00	
37.92	5070	0.0	0	0.00	
38.20	1883	0.0	0	0.00	
38.49	9518	2.0	40	0.40	CIS 1,3-DCPE
38.92	3108	0.0	0	0.00	
39.10	1941	0.0	0	0.00	
39.41	3167	0.0	0	0.00	
39.99	7715	0.0	0	0.00	
40.35	2582	0.0	0	0.00	
40.84	9964	2.0	40	0.40	TRANS 1,3-DCPE
41.17	3728	0.0	0	0.00	
41.45	14647	2.0	40	0.40	1,1,2-TCA
41.84	3155	0.0	0	0.00	
42.59	35743	4.0	80	0.80	1,3 DCPA/PCE
43.30	2453	0.0	0	0.00	
43.62	8545	2.0	40	0.40	DIBRCLMETHANE
44.12	3783	0.0	0	0.00	
44.58	3452	2.0	40	0.40	1,2-DBEA (EDB)
44.71	2668	0.0	0	0.00	
45.00	4967	0.0	0	0.00	
45.64	14869	20.0	400	4.00	1CL4FBZ (SURR)
45.92	3056	0.0	0	0.00	
46.22	5911	2.0	40	0.40	CHLOROBENZENE
46.42	15809	2.0	40	0.40	1,1,1,2-PCA
46.75	1767	0.0	0	0.00	
47.22	773186	5.0	100	1.00	1CL2FBZ (IS)
48.00	7630	0.0	0	0.00	
48.54	6337	0.0	0	0.00	
48.95	3756	0.0	0	0.00	
49.29	3054	0.0	0	0.00	
49.44	1642	0.0	0	0.00	
49.67	1275	0.0	0	0.00	
49.89	3193	0.0	0	0.00	
50.13	2332	0.0	0	0.00	
50.29	1456	2.0	40	0.40	BROMOFORM
50.63	3849	0.0	0	0.00	
50.81	1398	0.0	0	0.00	
51.04	8044	2.0	40	0.40	1,1,2,2-PCA
51.32	3793	0.0	0	0.00	
51.69	7698	2.0	40	0.40	1,2,3-TCPA
51.98	4291	2.0	40	0.40	BROMOBENZENE
52.34	3379	0.0	0	0.00	
52.59	4525	2.0	40	0.40	2-CL TOLUENE
52.79	6743	2.0	40	0.40	4-CL TOLUENE
53.13	2003	0.0	0	0.00	
53.33	3940	0.0	0	0.00	
53.79	1386	0.0	0	0.00	
54.19	1207	0.0	0	0.00	
54.41	637	0.0	0	0.00	
54.79	996	0.0	0	0.00	
55.04	1107	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.18
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.4 ppb 2
 Acquired : May 28, 1996 14:42:32
 Printed : May 29, 1996 16:02:30

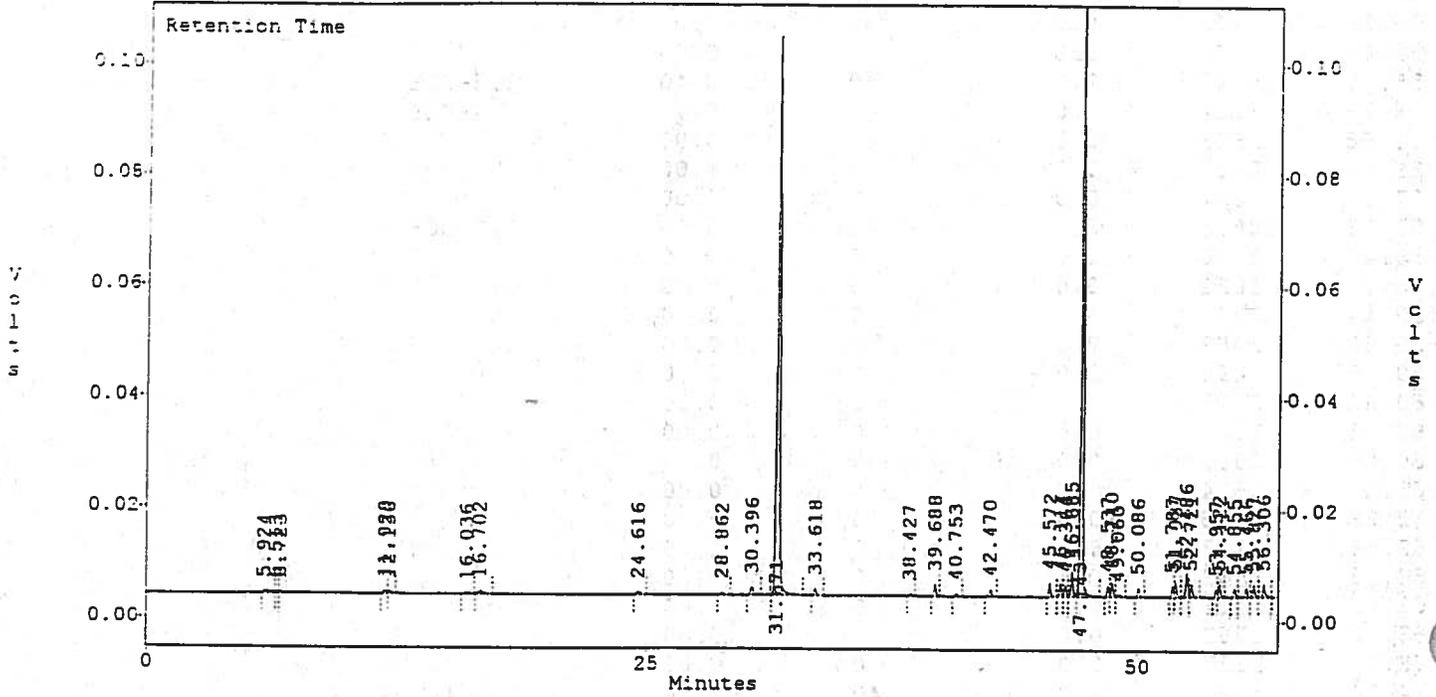
Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
55.35	1412	0.0	0	0.00	
55.61	1824	0.0	0	0.00	
55.95	9867	2.0	40	0.40	1,3-DCB
56.39	8214	2.0	40	0.40	1,4-DCB
56.66	1623	0.0	0	0.00	
56.89	1810	0.0	0	0.00	
57.13	1354	0.0	0	0.00	
57.93	10881	2.0	40	0.40	1,2-DCB
58.45	3360	0.0	0	0.00	
58.91	1021	0.0	0	0.00	
59.44	2509	0.0	0	0.00	
59.80	3489	0.0	0	0.00	
60.19	490	0.0	0	0.00	
60.48	2375	0.0	0	0.00	
60.78	1500	0.0	0	0.00	
60.93	1953	0.0	0	0.00	
61.68	7614	0.0	0	0.00	
62.29	3656	0.0	0	0.00	
62.66	2159	0.0	0	0.00	
62.83	2462	0.0	0	0.00	
63.09	731	0.0	0	0.00	
63.50	1762	0.0	0	0.00	
63.90	1327	0.0	0	0.00	
64.24	5300	2.0	40	0.40	1,2,4-TCB
64.64	11579	2.0	40	0.40	HEXACHLOROCYCLOHEPTADIENE
64.90	1344	0.0	0	0.00	
65.24	445	0.0	0	0.00	
65.35	271	0.0	0	0.00	
65.79	6589	2.0	40	0.40	1,2,3-TCB
66.07	1189	0.0	0	0.00	
66.48	1306	0.0	0	0.00	
66.79	588	0.0	0	0.00	
66.92	369	0.0	0	0.00	

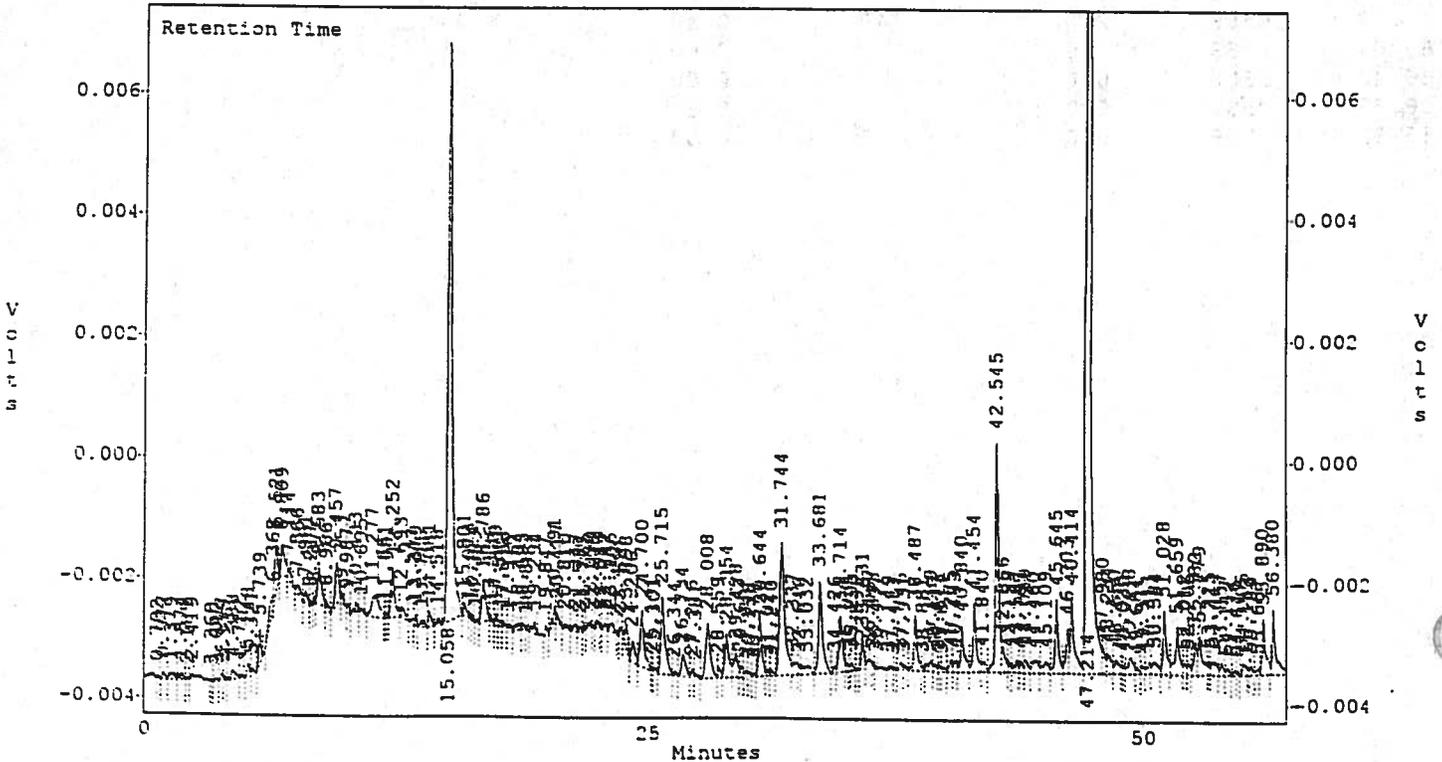
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 28, 1996 16:10:08
 Printed : May 29, 1996 16:02:56

c:\ezchrom\voatemp\160527.19 -- Channel A



c:\ezchrom\voatemp\160527.19 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 28, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.92	9830	0.0	0	0.00	
6.51	2533	0.0	0	0.00	
6.72	3242	2.5	50	0.50	Vinyl Chloride
11.93	5234	0.0	0	0.00	
12.14	4182	2.5	50	0.50	1,1-dce
16.04	2945	2.5	50	0.50	Mtbe
16.70	8181	2.5	50	0.50	Trans 1,2-dce
24.62	6857	2.5	50	0.50	Cis 1,2-dce
28.86	5358	2.5	50	0.50	1,1-dcpe
30.40	15869	2.5	50	0.50	Benzene
31.67	1050155	5.0	100	1.00	Flbenzene (IS)
33.62	10626	2.5	50	0.50	Tce
38.43	2952	2.5	50	0.50	Cis 1,3-dcpe
39.69	15867	2.5	50	0.50	Toluene
40.75	3714	2.5	50	0.50	Trans 1,3-dcpe
42.47	10823	2.5	50	0.50	Pce
45.57	16635	25.0	500	5.00	1cl4fbz (surr)
46.11	15784	2.5	50	0.50	Chlorobenzene
46.36	13833	2.5	50	0.50	Ethylbenzene
46.69	32486	5.0	100	1.00	M/P Xylene
47.14	1032046	5.0	100	1.00	1cl2fbz (IS)
48.54	13523	2.5	50	0.50	O Xylene
48.74	17656	2.5	50	0.50	Styrene
49.06	3755	0.0	0	0.00	
50.09	11376	2.5	50	0.50	Isopropylbenzene
51.79	12068	2.5	50	0.50	n-propylbenzene
51.94	16918	2.5	50	0.50	Bromobenzene
52.49	33827	5.0	100	1.00	1,3,5-tmb/2-cl tol
52.72	16284	2.5	50	0.50	4-cl toluene
53.96	10074	2.5	50	0.50	t-butylbenzene
54.12	15842	2.5	50	0.50	1,2,4-tmb
54.86	10966	2.5	50	0.50	s-butylbenzene
55.47	11158	2.5	50	0.50	p-isopropyltoluene
55.83	13442	2.5	50	0.50	1,3-dcb
56.31	16887	2.5	50	0.50	1,4-dcb
57.21	11951	2.5	50	0.50	n-butylbenzene 0.012 = AR
57.86	13414	2.5	50	0.50	1,2-dcb
60.13	2842	0.0	0	0.00	
64.16	5315	2.5	50	0.50	1,2,4-tcb
64.59	5878	2.5	50	0.50	Hexachlorobutadiene
64.99	8157	2.5	50	0.50	Napthalene
65.73	8837	2.5	50	0.50	1,2,3-tcb

UI 04 Jun 96

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 28, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
0.70	233	0.0	0	0.00	
0.98	1168	0.0	0	0.00	
1.38	1959	0.0	0	0.00	
1.87	1424	0.0	0	0.00	
2.18	237	0.0	0	0.00	
2.42	612	0.0	0	0.00	
3.36	251	0.0	0	0.00	
3.64	591	0.0	0	0.00	
3.88	1004	0.0	0	0.00	
3.98	536	0.0	0	0.00	
4.39	2791	0.0	0	0.00	
4.75	671	0.0	0	0.00	
5.15	1413	0.0	0	0.00	
5.32	576	0.0	0	0.00	
5.74	4315	2.5	50	0.50	DCDFM
6.37	4380	2.5	50	0.50	CHLOROMETHANE
6.52	8766	0.0	0	0.00	
6.81	6486	2.5	50	0.50	VINYL CHLORIDE
7.11	1882	0.0	0	0.00	
7.57	2088	0.0	0	0.00	
7.96	1906	0.0	0	0.00	
8.22	488	2.5	50	0.50	BROMOMETHANE
8.37	448	0.0	0	0.00	
8.58	8253	2.5	50	0.50	CHLOROETHANE
8.97	1283	0.0	0	0.00	
9.46	8323	2.5	50	0.50	TCFM
9.75	806	0.0	0	0.00	
9.99	833	0.0	0	0.00	
10.42	1770	0.0	0	0.00	
10.69	666	0.0	0	0.00	
11.28	9461	2.5	50	0.50	FREON 113
11.85	351	0.0	0	0.00	
11.98	345	0.0	0	0.00	
12.25	10275	2.5	50	0.50	1,1-DCE 0.012-A.R.V
12.69	2303	0.0	0	0.00	
13.25	880	0.0	0	0.00	
13.38	905	0.0	0	0.00	
13.71	1738	0.0	0	0.00	
14.08	2656	0.0	0	0.00	
14.52	1284	0.0	0	0.00	
15.06	130404	2.5	50	0.50	METH CHLORIDE
15.80	2008	0.0	0	0.00	
16.07	322	0.0	0	0.00	
16.22	542	0.0	0	0.00	
16.39	589	0.0	0	0.00	
16.79	8806	2.5	50	0.50	TRANS 1,2-DCE
17.13	868	0.0	0	0.00	
17.38	1286	0.0	0	0.00	
17.58	641	0.0	0	0.00	
17.75	658	0.0	0	0.00	
17.98	737	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 28, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
18.49	1764	0.0	0	0.00	
18.69	813	0.0	0	0.00	
18.89	335	0.0	0	0.00	
19.29	2374	0.0	0	0.00	
19.85	1345	0.0	0	0.00	
20.29	2260	2.5	50	0.50	1,1-DCA
20.42	1047	0.0	0	0.00	
20.81	1350	0.0	0	0.00	
21.35	1411	0.0	0	0.00	
21.56	829	0.0	0	0.00	
21.77	573	0.0	0	0.00	
22.09	972	0.0	0	0.00	
22.21	292	0.0	0	0.00	
22.40	1186	0.0	0	0.00	
22.58	362	0.0	0	0.00	
22.85	1184	0.0	0	0.00	
23.11	2165	0.0	0	0.00	
23.46	243	0.0	0	0.00	
23.59	935	0.0	0	0.00	
23.90	3910	0.0	0	0.00	
24.21	4647	2.5	50	0.50	2,2-DCPA
24.70	13456	2.5	50	0.50	CIS 1,2-DCE
25.19	449	0.0	0	0.00	
25.30	865	0.0	0	0.00	
25.72	18494	2.5	50	0.50	CHLOROFORM AR = 0.022
26.34	731	0.0	0	0.00	
26.73	5777	2.5	50	0.50	BCM UI 31 May 96
27.22	1225	0.0	0	0.00	
27.38	929	0.0	0	0.00	
28.01	15011	2.5	50	0.50	1,1,1-TCA
28.56	1803	0.0	0	0.00	
28.95	10892	2.5	50	0.50	1,1-DCPE
29.43	5405	2.5	50	0.50	CARBON TET
29.67	1910	0.0	0	0.00	
29.94	1311	0.0	0	0.00	
30.13	760	0.0	0	0.00	
30.38	631	0.0	0	0.00	
30.64	12385	2.5	50	0.50	1,2-DCA
31.03	1167	0.0	0	0.00	
31.24	1109	0.0	0	0.00	
31.74	39748	0.0	0	0.00	
32.34	4080	2.5	50	0.50	2-CL ETH VI ETH
32.65	974	0.0	0	0.00	
33.03	3984	0.0	0	0.00	
33.68	21749	2.5	50	0.50	TCE
34.43	1041	0.0	0	0.00	
34.71	12777	2.5	50	0.50	1,2-DCPA
35.03	1044	0.0	0	0.00	
35.23	684	0.0	0	0.00	
35.29	1094	0.0	0	0.00	
35.59	344	0.0	0	0.00	
35.83	4141	2.5	50	0.50	BRDICLMETHANE
36.17	333	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 28, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
36.39	238	0.0	0	0.00	
36.50	268	0.0	0	0.00	
37.15	859	0.0	0	0.00	
37.41	240	0.0	0	0.00	
37.75	1593	0.0	0	0.00	
37.93	897	0.0	0	0.00	
38.49	10936	2.5	50	0.50	CIS 1,3-DCPE
38.88	558	0.0	0	0.00	
39.29	2950	0.0	0	0.00	
39.42	1508	0.0	0	0.00	
39.67	887	0.0	0	0.00	
39.82	1050	0.0	0	0.00	
40.28	2059	0.0	0	0.00	
40.48	2393	0.0	0	0.00	
40.84	10315	2.5	50	0.50	TRANS 1,3-DCPE
41.45	13293	2.5	50	0.50	1,1,2-TCA
41.84	2432	0.0	0	0.00	
42.55	43168	5.0	100	1.00	1,3 DCPA/PCE
42.87	5531	0.0	0	0.00	
43.16	1577	0.0	0	0.00	
43.59	3095	2.5	50	0.50	DIBRCLMETHANE
43.76	2275	0.0	0	0.00	
44.04	3241	0.0	0	0.00	
44.46	4849	2.5	50	0.50	1,2-DBEA (EDB)
45.11	4073	0.0	0	0.00	
45.65	13928	25.0	500	5.00	1CL4FBZ (SURR)
46.20	7580	2.5	50	0.50	CHLOROBENZENE
46.41	18331	2.5	50	0.50	1,1,1,2-PCA
47.21	848689	5.0	100	1.00	1CL2FBZ (IS)
47.98	4815	0.0	0	0.00	
48.23	4832	0.0	0	0.00	
48.65	3744	0.0	0	0.00	
48.92	914	0.0	0	0.00	
49.04	927	0.0	0	0.00	
49.34	5398	0.0	0	0.00	
49.68	1172	0.0	0	0.00	
49.97	1479	0.0	0	0.00	
50.31	2499	2.5	50	0.50	BROMOFORM
50.58	4658	0.0	0	0.00	
51.03	11896	2.5	50	0.50	1,1,2,2-PCA
51.66	12330	2.5	50	0.50	1,2,3-TCPA
52.01	2229	2.5	50	0.50	BROMOBENZENE
52.21	1842	0.0	0	0.00	
52.58	6197	2.5	50	0.50	2-CL TOLUENE
52.78	8962	2.5	50	0.50	4-CL TOLUENE
53.22	1339	0.0	0	0.00	
53.41	4769	0.0	0	0.00	
53.86	2575	0.0	0	0.00	
54.12	1514	0.0	0	0.00	
54.48	1079	0.0	0	0.00	
54.65	391	0.0	0	0.00	
54.91	2535	0.0	0	0.00	
55.14	878	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.19
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 0.5 ppb 3
 Acquired : May 28, 1996 16:10:08
 Printed : May 29, 1996 16:02:58

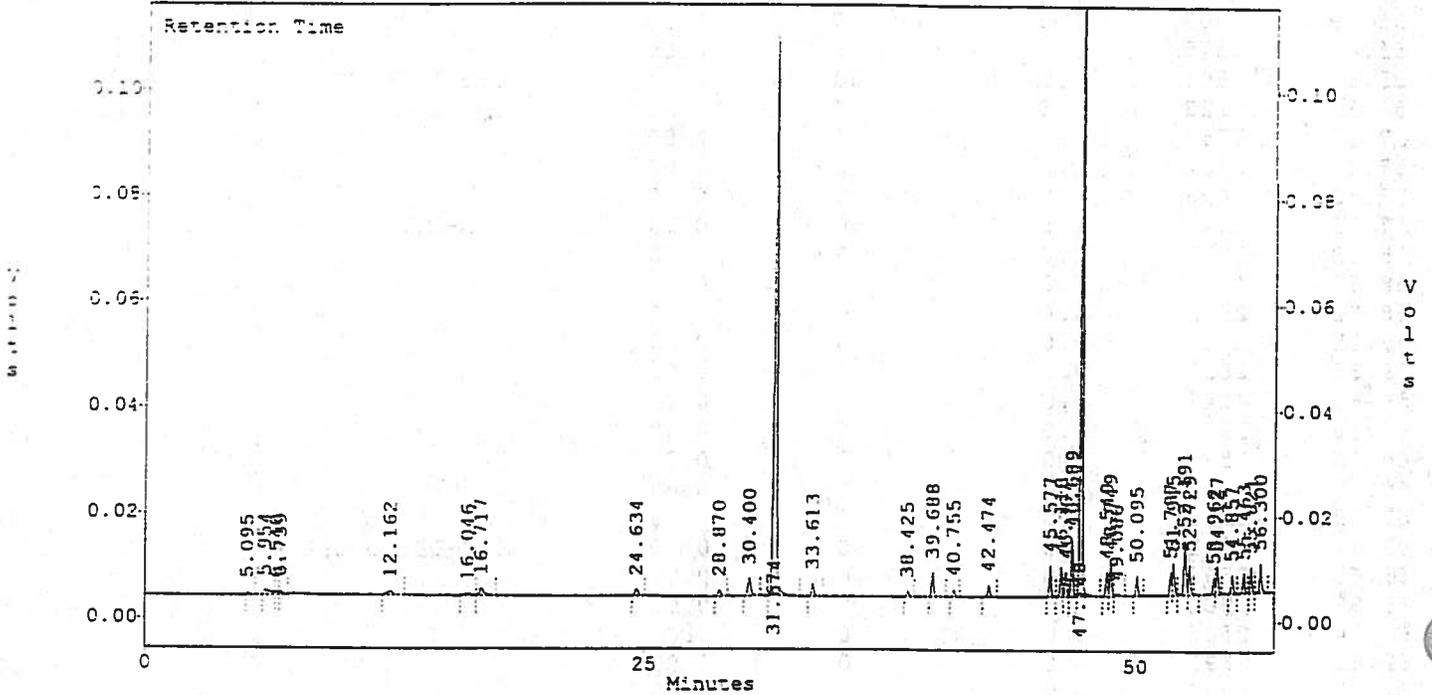
Chromatogram Results

RT (min)	PK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
55.29	1607	0.0	0	0.00	
55.67	1345	0.0	0	0.00	
55.89	10898	2.5	50	0.50	1,3-DCE
56.38	13123	2.5	50	0.50	1,4-DCE
57.17	2753	0.0	0	0.00	
57.26	1454	0.0	0	0.00	
57.62	2693	0.0	0	0.00	
57.93	10345	2.5	50	0.50	1,2-DCE
58.33	2278	0.0	0	0.00	
58.68	1443	0.0	0	0.00	
58.82	2561	0.0	0	0.00	
59.11	1830	0.0	0	0.00	
59.36	2857	0.0	0	0.00	
59.86	4349	0.0	0	0.00	
60.23	1971	0.0	0	0.00	
60.50	1548	0.0	0	0.00	
60.67	1007	0.0	0	0.00	
61.03	1755	0.0	0	0.00	
61.49	2521	2.5	50	0.50	1,2-DBr-3-CPA
61.61	2596	0.0	0	0.00	
61.99	1232	0.0	0	0.00	
62.14	2545	0.0	0	0.00	
62.60	3891	0.0	0	0.00	
62.87	4290	0.0	0	0.00	
63.33	770	0.0	0	0.00	
63.43	685	0.0	0	0.00	
63.78	1316	0.0	0	0.00	
63.98	650	0.0	0	0.00	
64.23	3281	2.5	50	0.50	1,2,4-TCB
64.65	15820	2.5	50	0.50	HEXACLBUTADIENE
65.15	201	0.0	0	0.00	
65.37	2689	0.0	0	0.00	
65.83	3018	2.5	50	0.50	1,2,3-TCB
66.08	288	0.0	0	0.00	
66.24	776	0.0	0	0.00	
66.51	604	0.0	0	0.00	
66.70	1046	0.0	0	0.00	

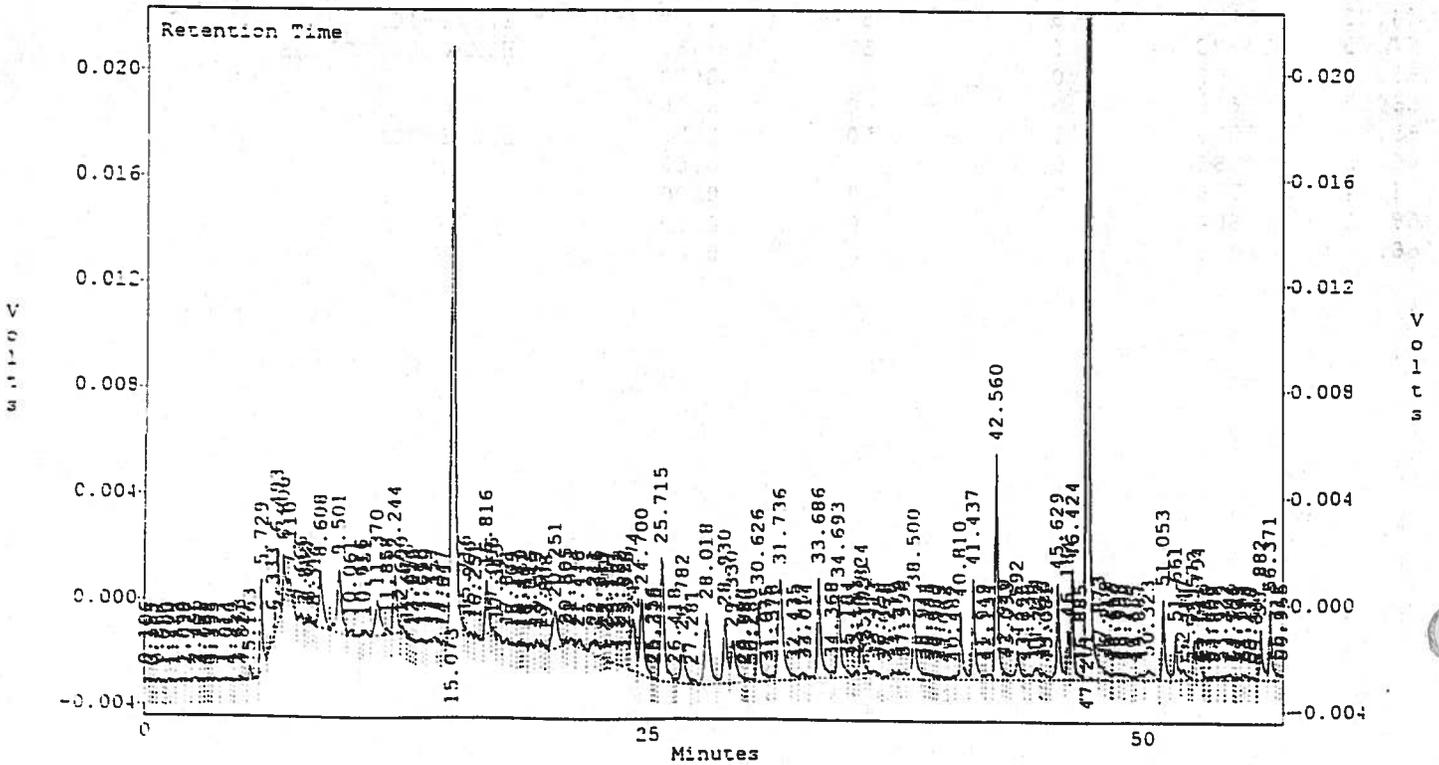
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.04
Method : c:\ezchrom\voatemp\lvoa0527.met
Sample ID : 1.0 ppb 4
Acquired : May 27, 1996 18:03:34
Printed : May 29, 1996 16:03:27

c:\ezchrom\voatemp\160527.04 -- Channel A



c:\ezchrom\voatemp\160527.04 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.04
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 1.0 ppb 4
 Acquired : May 27, 1996 18:03:34
 Printed : May 29, 1996 16:03:28

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.10	4015	0.0	0	0.00	
5.95	24108	0.0	0	0.00	
6.54	6546	0.0	0	0.00	
6.74	8202	5.0	100	1.00	Vinyl Chloride
12.16	16309	5.0	100	1.00	1,1-dce
16.05	8967	5.0	100	1.00	Mtbe
16.72	20862	5.0	100	1.00	Trans 1,2-dce
24.63	16283	5.0	100	1.00	Cis 1,2-dce
28.87	12845	5.0	100	1.00	1,1-dcpe
30.40	38135	5.0	100	1.00	Benzene
31.67	1107814	5.0	100	1.00	Flbenzene (IS)
33.61	22404	5.0	100	1.00	Tce
38.43	7458	5.0	100	1.00	Cis 1,3-dcpe
39.69	38507	5.0	100	1.00	Toluene
40.75	9450	5.0	100	1.00	Trans 1,3-dcpe
42.47	18100	5.0	100	1.00	Pce
45.58	38606	50.0	1000	10.00	1cl4fbz (surr)
46.12	37432	5.0	100	1.00	Chlorobenzene
46.37	32872	5.0	100	1.00	Ethylbenzene
46.69	76746	10.0	200	2.00	M/P Xylene
47.15	1091063	5.0	100	1.00	1cl2flbz (IS)
48.55	31516	5.0	100	1.00	O Xylene
48.75	41188	5.0	100	1.00	Styrene
49.09	5441	0.0	0	0.00	
50.09	27071	5.0	100	1.00	Isopropylbenzene
51.80	28866	5.0	100	1.00	n-propylbenzene
51.95	39130	5.0	100	1.00	Bromobenzene
52.49	80265	10.0	200	2.00	1,3,5-tmb/2-cl tol
52.73	36580	5.0	100	1.00	4-cl toluene
53.96	23778	5.0	100	1.00	t-butylbenzene
54.13	38533	5.0	100	1.00	1,2,4-tmb
54.86	26037	5.0	100	1.00	s-butylbenzene
55.46	25738	5.0	100	1.00	p-isopropyltoluene
55.82	31376	5.0	100	1.00	1,3-dcb
56.30	38914	5.0	100	1.00	1,4-dcb
57.20	28450	5.0	100	1.00	n-butylbenzene
57.85	28125	5.0	100	1.00	1,2-dcb
60.12	5610	0.0	0	0.00	
63.21	6955	0.0	0	0.00	
64.14	11562	5.0	100	1.00	1,2,4-tcb
64.57	11547	5.0	100	1.00	Hexachlorobutadiene
64.97	23270	5.0	100	1.00	Napthalene
65.17	5543	0.0	0	0.00	
65.72	8984	5.0	100	1.00	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.04
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 1.0 ppb 4
 Acquired : May 27, 1996 18:03:34
 Printed : May 29, 1996 16:03:29

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Scin (µg/l)	Compound
0.11	1546	0.0	0	0.00	
0.35	919	0.0	0	0.00	
0.47	962	0.0	0	0.00	
0.69	1833	0.0	0	0.00	
1.01	551	0.0	0	0.00	
1.20	1393	0.0	0	0.00	
1.43	1256	0.0	0	0.00	
1.90	2759	0.0	0	0.00	
2.04	1971	0.0	0	0.00	
2.50	3042	0.0	0	0.00	
2.78	1336	0.0	0	0.00	
3.03	1239	0.0	0	0.00	
3.20	1031	0.0	0	0.00	
3.35	1873	0.0	0	0.00	
4.01	2224	0.0	0	0.00	
4.25	548	0.0	0	0.00	
4.66	1914	0.0	0	0.00	
4.82	436	0.0	0	0.00	
5.16	4520	0.0	0	0.00	
5.73	31773	5.0	100	1.00	DCDFM
6.33	6853	5.0	100	1.00	CHLOROMETHANE
6.49	28255	0.0	0	0.00	
6.81	12928	5.0	100	1.00	VINYL CHLORIDE
7.11	4626	0.0	0	0.00	
7.67	3285	0.0	0	0.00	
7.88	1005	0.0	0	0.00	
8.04	1516	0.0	0	0.00	
8.31	1157	5.0	100	1.00	BROMOMETHANE
8.61	29381	5.0	100	1.00	CHLOROETHANE
9.50	37562	5.0	100	1.00	TCFM
10.06	3362	0.0	0	0.00	
10.62	835	0.0	0	0.00	
10.75	2044	0.0	0	0.00	
11.37	23271	5.0	100	1.00	FREON 113
11.86	2833	0.0	0	0.00	
12.24	28670	5.0	100	1.00	1,1-DCE
12.60	3145	0.0	0	0.00	
12.88	994	0.0	0	0.00	
13.06	528	0.0	0	0.00	
13.18	490	0.0	0	0.00	
13.52	1467	0.0	0	0.00	
13.69	477	0.0	0	0.00	
14.16	3573	0.0	0	0.00	
14.38	913	0.0	0	0.00	
14.65	1441	0.0	0	0.00	
15.07	300774	5.0	100	1.00	METH CHLORIDE
15.72	1321	0.0	0	0.00	
15.97	1850	0.0	0	0.00	
16.25	2091	0.0	0	0.00	
16.82	22660	5.0	100	1.00	TRANS 1,2-DCE
17.10	2033	0.0	0	0.00	

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File : c:\ezchrom\voatemp\160527.04
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 1.0 ppb 4
 Acquired : May 27, 1996 18:03:34
 Printed : May 29, 1996 16:03:29

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
17.35	2743	0.0	0	0.00	
17.82	2750	0.0	0	0.00	
18.11	1030	0.0	0	0.00	
18.45	1489	0.0	0	0.00	
18.57	665	0.0	0	0.00	
18.69	1319	0.0	0	0.00	
19.05	2849	0.0	0	0.00	
19.33	2198	0.0	0	0.00	
19.57	1388	0.0	0	0.00	
19.81	795	0.0	0	0.00	
20.25	27828	5.0	100	1.00	1,1-DCA
20.80	1154	0.0	0	0.00	
21.02	3486	0.0	0	0.00	
21.45	5757	0.0	0	0.00	
22.21	7928	0.0	0	0.00	
22.37	7686	0.0	0	0.00	
22.74	5122	0.0	0	0.00	
22.87	4357	0.0	0	0.00	
22.96	5535	0.0	0	0.00	
23.19	14733	0.0	0	0.00	
23.55	10906	0.0	0	0.00	
23.82	17330	0.0	0	0.00	
23.97	7354	0.0	0	0.00	
24.27	31709	5.0	100	1.00	2,2-DCPA
24.70	45881	5.0	100	1.00	CIS 1,2-DCE
25.26	402	0.0	0	0.00	
25.38	668	0.0	0	0.00	
25.72	65559	5.0	100	1.00	CHLOROFORM
26.42	1059	0.0	0	0.00	
26.78	23680	5.0	100	1.00	BCM
27.28	3252	0.0	0	0.00	
28.02	50470	5.0	100	1.00	1,1,1-TCA
28.93	35814	5.0	100	1.00	1,1-DCPE
29.33	28221	5.0	100	1.00	CARBON TET
29.89	1391	0.0	0	0.00	
29.98	942	0.0	0	0.00	
30.28	2194	0.0	0	0.00	
30.63	34179	5.0	100	1.00	1,2-DCA
31.08	1311	0.0	0	0.00	
31.38	3316	0.0	0	0.00	
31.74	69675	0.0	0	0.00	
32.43	3265	0.0	0	0.00	
32.86	3349	5.0	100	1.00	2-CL ETH VI ETH
33.01	1959	0.0	0	0.00	
33.69	50843	5.0	100	1.00	TCE
34.37	2079	0.0	0	0.00	
34.69	38371	5.0	100	1.00	1,2-DCPA
35.18	1773	0.0	0	0.00	
35.45	516	0.0	0	0.00	
35.59	1976	0.0	0	0.00	
35.82	14264	5.0	100	1.00	BRDICLMETHANE
35.96	3064	0.0	0	0.00	
36.07	1367	5.0	100	1.00	DIBROMOMETHANE

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File : c:\ezchrom\voatemp\160527.04
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 1.0 ppb 4
 Acquired : May 27, 1996 18:03:34
 Printed : May 29, 1996 16:03:29

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
36.41	2722	0.0	0	0.00	
36.76	1095	0.0	0	0.00	
37.06	1301	0.0	0	0.00	
37.27	1680	0.0	0	0.00	
37.57	4497	0.0	0	0.00	
37.77	2207	0.0	0	0.00	
38.00	3360	0.0	0	0.00	
38.50	35705	5.0	100	1.00	CIS 1,3-DCPE
38.94	1890	0.0	0	0.00	
39.15	3039	0.0	0	0.00	
39.38	1996	0.0	0	0.00	
39.58	1355	0.0	0	0.00	
39.77	2438	0.0	0	0.00	
40.06	794	0.0	0	0.00	
40.48	2214	0.0	0	0.00	
40.81	26158	5.0	100	1.00	TRANS 1,3-DCPE
41.44	38296	5.0	100	1.00	1,1,2-TCA
41.95	1603	0.0	0	0.00	
42.13	3812	0.0	0	0.00	
42.56	79985	10.0	200	2.00	1,3 DCPA/PCE
42.94	3135	0.0	0	0.00	
43.09	2257	0.0	0	0.00	
43.59	15376	5.0	100	1.00	DIBRCLMETHANE
43.89	985	0.0	0	0.00	
44.14	3192	0.0	0	0.00	
44.49	8700	5.0	100	1.00	1,2-DBEA(EDB)
44.76	1229	0.0	0	0.00	
44.93	2897	0.0	0	0.00	
45.08	1913	0.0	0	0.00	
45.63	40385	50.0	1000	10.00	1CL4FBZ (SURR)
46.18	15516	5.0	100	1.00	CHLOROENZENE
46.42	40730	5.0	100	1.00	1,1,1,2-PCA
46.88	1365	0.0	0	0.00	
47.20	890777	5.0	100	1.00	1CL2FBZ (IS)
47.87	8532	0.0	0	0.00	
48.21	4637	0.0	0	0.00	
48.46	1342	0.0	0	0.00	
48.65	4560	0.0	0	0.00	
48.95	3491	0.0	0	0.00	
49.17	3918	0.0	0	0.00	
49.62	1367	0.0	0	0.00	
49.89	4793	0.0	0	0.00	
50.32	9584	5.0	100	1.00	BROMOFORM
51.05	29628	5.0	100	1.00	1,1,2,2-PCA
51.66	18627	5.0	100	1.00	1,2,3-TCPA
52.05	6857	5.0	100	1.00	BROMOENZENE
52.34	1078	0.0	0	0.00	
52.57	11712	5.0	100	1.00	2-CL TOLUENE
52.79	15703	5.0	100	1.00	4-CL TOLUENE
53.02	1047	0.0	0	0.00	
53.12	1145	0.0	0	0.00	
53.30	736	0.0	0	0.00	
53.51	2763	0.0	0	0.00	

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File : c:\ezchrom\voatemp\160527.04
 Method : c:\ezchrom\voatemp\lvoa0527.mec
 Sample ID : 1.0 ppb 4
 Acquired : May 27, 1996 18:03:34
 Printed : May 29, 1996 16:03:29

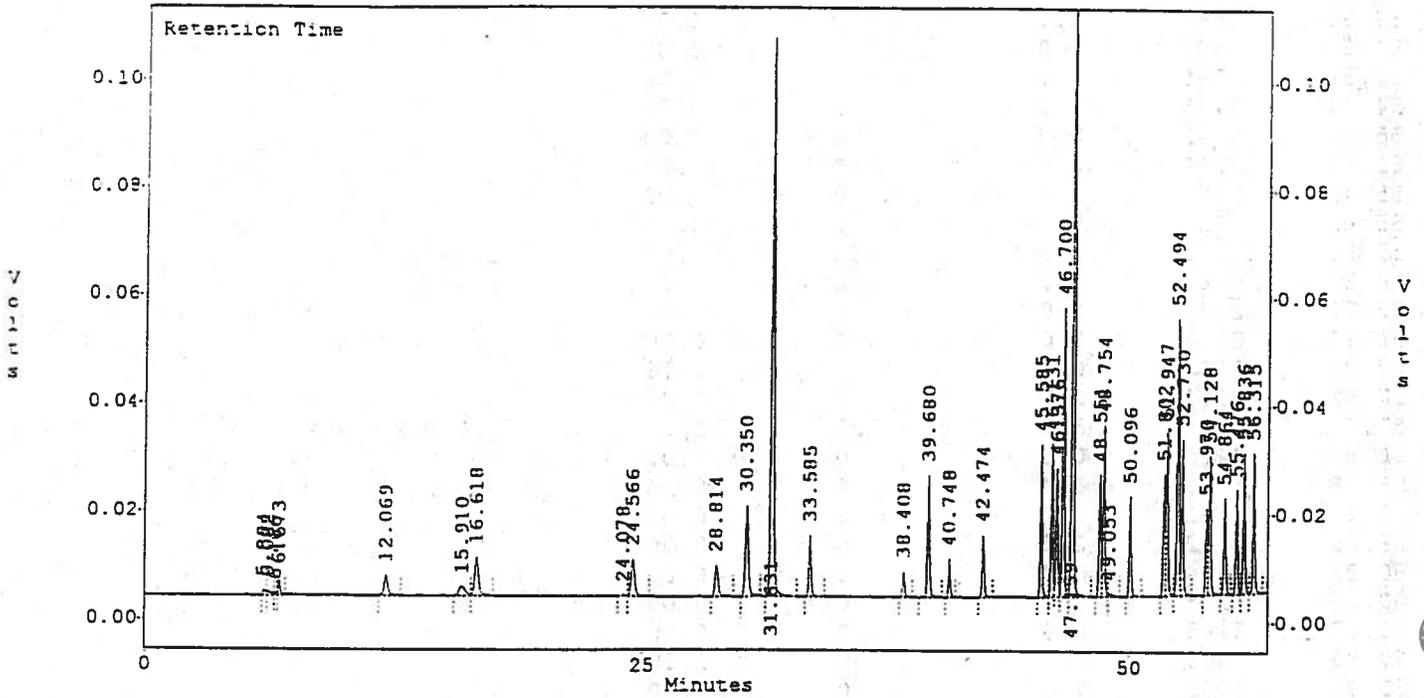
Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
53.93	2864	0.0	0	0.00	
54.35	4362	0.0	0	0.00	
54.56	789	0.0	0	0.00	
54.71	1745	0.0	0	0.00	
55.00	2242	0.0	0	0.00	
55.12	2190	0.0	0	0.00	
55.42	2207	0.0	0	0.00	
55.69	314	0.0	0	0.00	
55.88	20153	5.0	100	1.00	1,3-DCB
56.37	25469	5.0	100	1.00	1,4-DCB
56.71	2565	0.0	0	0.00	
56.97	2174	0.0	0	0.00	
57.25	3791	0.0	0	0.00	
57.61	3103	0.0	0	0.00	
57.91	27458	5.0	100	1.00	1,2-DCB
58.88	3425	0.0	0	0.00	
59.58	5798	0.0	0	0.00	
59.78	1881	0.0	0	0.00	
59.98	942	0.0	0	0.00	
60.25	2504	0.0	0	0.00	
60.39	1135	0.0	0	0.00	
60.67	2765	0.0	0	0.00	
60.85	1000	0.0	0	0.00	
61.01	2042	0.0	0	0.00	
61.26	1573	5.0	100	1.00	1,2-DBr-3-CPA
61.53	4187	0.0	0	0.00	
61.77	2976	0.0	0	0.00	
62.35	2342	0.0	0	0.00	
62.62	2460	0.0	0	0.00	
63.14	1996	0.0	0	0.00	
63.41	2493	0.0	0	0.00	
63.63	399	0.0	0	0.00	
63.83	1852	0.0	0	0.00	
64.21	3805	5.0	100	1.00	1,2,4-TCB
64.43	756	0.0	0	0.00	
64.64	11302	5.0	100	1.00	HEXACLBTADIENE
65.01	1926	0.0	0	0.00	
65.21	1203	0.0	0	0.00	
65.47	3252	5.0	100	1.00	1,2,3-TCB
65.78	501	0.0	0	0.00	
65.90	364	0.0	0	0.00	
66.06	963	0.0	0	0.00	
66.29	3401	0.0	0	0.00	
66.71	1963	0.0	0	0.00	
67.10	225	0.0	0	0.00	

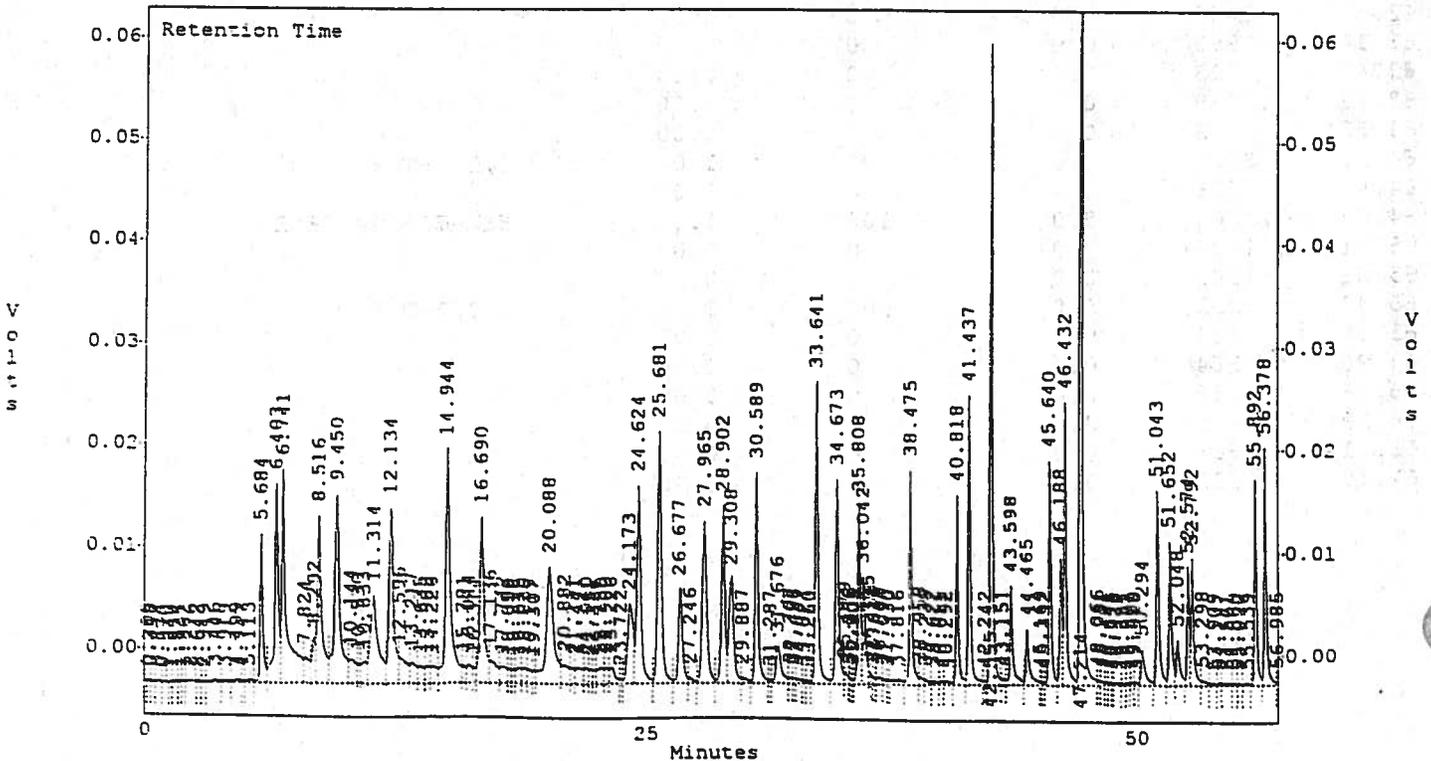
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.05
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 5.0 ppb 5
 Acquired : May 27, 1996 19:29:49
 Printed : May 29, 1996 16:03:50

c:\ezchrom\voatemp\160527.05 -- Channel A



c:\ezchrom\voatemp\160527.05 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\vcatemp\160527.05
 Method : c:\ezchrom\vcatemp\lvoa0527.met
 Sample ID : 5.0 ppb 5
 Acquired : May 27, 1996 19:29:49
 Printed : May 29, 1996 16:03:52

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.89	9965	0.0	0	0.00	
6.08	12129	0.0	0	0.00	
6.47	3777	0.0	0	0.00	
6.67	19704	25.0	500	5.00	Vinyl Chloride
12.07	50099	25.0	500	5.00	1,1-dce
15.91	39854	25.0	500	5.00	Mtbe
16.62	96465	25.0	500	5.00	Trans 1,2-dce
24.08	2237	0.0	0	0.00	
24.57	88298	25.0	500	5.00	Cis 1,2-dce
28.81	67932	25.0	500	5.00	1,1-dcpe
30.35	188568	25.0	500	5.00	Benzene
31.63	1087288	5.0	100	1.00	Flbenzene (IS)
33.58	102314	25.0	500	5.00	Tce
38.41	34545	25.0	500	5.00	Cis 1,3-dcpe
39.68	179113	25.0	500	5.00	Toluene
40.75	45902	25.0	500	5.00	Trans 1,3-dcpe
42.47	85690	25.0	500	5.00	Pce
45.59	182432	250.0	5000	50.00	1cl4fbz (surr)
46.13	185234	25.0	500	5.00	Chlorobenzene
46.38	167232	25.0	500	5.00	Ethylbenzene
46.70	379493	50.0	1000	10.00	M/P Xylene
47.16	1078086	5.0	100	1.00	1cl2fbz (IS)
48.55	153543	25.0	500	5.00	O Xylene
48.75	206385	25.0	500	5.00	Styrene
49.05	6368	0.0	0	0.00	
50.10	133686	25.0	500	5.00	Isopropylbenzene
51.80	145167	25.0	500	5.00	n-propylbenzene
51.95	197943	25.0	500	5.00	Bromobenzene
52.49	387357	50.0	1000	10.00	1,3,5-tmb/2-cl tol
52.73	183806	25.0	500	5.00	4-cl toluene
53.97	113122	25.0	500	5.00	t-butylbenzene
54.13	176785	25.0	500	5.00	1,2,4-tmb
54.86	126628	25.0	500	5.00	s-butylbenzene
55.48	127819	25.0	500	5.00	p-isopropyltoluene
55.84	161092	25.0	500	5.00	1,3-dcb
56.31	160724	25.0	500	5.00	1,4-dcb
57.22	135979	25.0	500	5.00	n-butylbenzene
57.87	130630	25.0	500	5.00	1,2-dcb
60.15	5163	0.0	0	0.00	
63.28	4455	0.0	0	0.00	
64.16	70803	25.0	500	5.00	1,2,4-tcb
64.59	64424	25.0	500	5.00	Hexachlorobutadiene
64.99	115211	25.0	500	5.00	Napthalene
65.73	66369	25.0	500	5.00	1,2,3-tcb
66.39	9593	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.05
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 5.0 ppb 5
 Acquired : May 27, 1996 19:29:49
 Printed : May 29, 1996 16:03:53

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln(µg/l)	Compound
0.20	1057	0.0	0	0.00	
0.35	745	0.0	0	0.00	
0.73	1487	0.0	0	0.00	
0.97	377	0.0	0	0.00	
1.34	582	0.0	0	0.00	
1.57	1268	0.0	0	0.00	
1.74	876	0.0	0	0.00	
1.96	983	0.0	0	0.00	
2.28	1935	0.0	0	0.00	
2.64	1009	0.0	0	0.00	
2.95	536	0.0	0	0.00	
3.45	4350	0.0	0	0.00	
3.92	3361	0.0	0	0.00	
4.50	5518	0.0	0	0.00	
4.75	1039	0.0	0	0.00	
5.11	5067	0.0	0	0.00	
5.68	136461	25.0	500	5.00	DCDFM
6.40	249140	25.0	500	5.00	CHLOROMETHANE
6.74	359200	25.0	500	5.00	VINYL CHLORIDE
7.82	51094	0.0	0	0.00	
8.29	49648	25.0	500	5.00	BROMOMETHANE
8.52	272430	25.0	500	5.00	CHLOROETHANE
9.45	367573	25.0	500	5.00	TCFM
10.14	60341	0.0	0	0.00	
10.53	16307	0.0	0	0.00	
10.83	43221	0.0	0	0.00	
11.31	235321	25.0	500	5.00	FREON 113
12.13	292908	25.0	500	5.00	1,1-DCE
12.60	72010	0.0	0	0.00	
13.22	40515	0.0	0	0.00	
13.63	35163	0.0	0	0.00	
13.98	28668	0.0	0	0.00	
14.23	37777	0.0	0	0.00	
14.94	415849	25.0	500	5.00	METH CHLORIDE
15.78	24225	0.0	0	0.00	
16.04	29945	0.0	0	0.00	
16.31	15711	0.0	0	0.00	
16.69	257614	25.0	500	5.00	TRANS 1,2-DCE
17.14	55789	0.0	0	0.00	
17.74	40704	0.0	0	0.00	
18.06	13619	0.0	0	0.00	
18.32	17632	0.0	0	0.00	
18.58	26365	0.0	0	0.00	
18.83	27284	0.0	0	0.00	
19.12	18880	0.0	0	0.00	
19.31	12753	0.0	0	0.00	
20.09	308555	25.0	500	5.00	1,1-DCA
20.88	50105	0.0	0	0.00	
21.29	18387	0.0	0	0.00	
21.44	42139	0.0	0	0.00	
21.96	21708	0.0	0	0.00	

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File : c:\ezchrom\voatemp\160527.05
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 5.0 ppb 5
 Acquired : May 27, 1996 19:29:49
 Printed : May 29, 1996 16:03:53

Channel B Results

RT(min)	PK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
22.13	15492	0.0	0	0.00	
22.32	16502	0.0	0	0.00	
22.73	37771	0.0	0	0.00	
22.98	21241	0.0	0	0.00	
23.23	33742	0.0	0	0.00	
23.72	3587	0.0	0	0.00	
24.17	153781	25.0	500	5.00	2,2-DCPA
24.62	300000	25.0	500	5.00	CIS 1,2-DCE
25.68	352989	25.0	500	5.00	CHLOROFORM
26.68	135720	25.0	500	5.00	BCM
27.25	7943	0.0	0	0.00	
27.97	263742	25.0	500	5.00	1,1,1-TCA
28.90	203932	25.0	500	5.00	1,1-DCPE
29.31	180055	25.0	500	5.00	CARBON TET
29.89	9456	0.0	0	0.00	
30.59	229996	25.0	500	5.00	1,2-DCA
31.29	3316	0.0	0	0.00	
31.68	71806	0.0	0	0.00	
32.31	6031	25.0	500	5.00	2-CL ETH VI ETH
32.49	5136	0.0	0	0.00	
32.64	7134	0.0	0	0.00	
33.02	3370	0.0	0	0.00	
33.26	4212	0.0	0	0.00	
33.64	308306	25.0	500	5.00	TCE
34.67	237180	25.0	500	5.00	1,2-DCPA
35.08	12307	0.0	0	0.00	
35.27	3092	0.0	0	0.00	
35.36	3213	0.0	0	0.00	
35.50	2339	0.0	0	0.00	
35.81	165428	25.0	500	5.00	BRDCLMETHANE
36.04	121984	25.0	500	5.00	DIBROMOMETHANE
36.31	10385	0.0	0	0.00	
36.46	4763	0.0	0	0.00	
36.61	6263	0.0	0	0.00	
36.90	11875	0.0	0	0.00	
37.10	5572	0.0	0	0.00	
37.33	3537	0.0	0	0.00	
37.82	17262	0.0	0	0.00	
38.48	187017	25.0	500	5.00	CIS 1,3-DCPE
38.96	11247	0.0	0	0.00	
39.24	7339	0.0	0	0.00	
39.62	6441	0.0	0	0.00	
40.01	4455	0.0	0	0.00	
40.29	7620	0.0	0	0.00	
40.82	159525	25.0	500	5.00	TRANS 1,3-DCPE
41.44	262247	25.0	500	5.00	1,1,2-TCA
42.24	4825	0.0	0	0.00	
42.56	553466	50.0	1000	10.00	1,3 DCPA/PCE
43.15	8128	0.0	0	0.00	
43.60	117667	25.0	500	5.00	DIBRCLMETHANE
44.47	73758	25.0	500	5.00	1,2-DBEA(EDB)
45.17	2310	0.0	0	0.00	
45.33	2341	0.0	0	0.00	

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File .. : c:\ezchrom\voatemp\160527.05
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 5.0 ppb 5
 Acquired : May 27, 1996 19:29:49
 Printed : May 29, 1996 16:03:53

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
45.64	196572	250.0	5000	50.00	1CL4FBZ (SURR)
46.19	99524	25.0	500	5.00	CHLOROBENZENE
46.43	272501	25.0	500	5.00	1,1,1,2-PCA
47.21	873477	5.0	100	1.00	1CL2FBZ (IS)
48.07	4807	0.0	0	0.00	
48.23	5207	0.0	0	0.00	
48.48	2710	0.0	0	0.00	
48.65	2862	0.0	0	0.00	
48.78	1623	0.0	0	0.00	
48.92	4444	0.0	0	0.00	
49.33	2178	0.0	0	0.00	
49.60	3044	0.0	0	0.00	
49.80	3718	0.0	0	0.00	
49.92	3880	0.0	0	0.00	
50.29	50870	25.0	500	5.00	BROMOFORM
51.04	172396	25.0	500	5.00	1,1,2,2-PCA
51.65	132648	25.0	500	5.00	1,2,3-TCPA
52.05	56918	25.0	500	5.00	BROMOBENZENE
52.57	92757	25.0	500	5.00	2-CL TOLUENE
52.79	108585	25.0	500	5.00	4-CL TOLUENE
53.30	8060	0.0	0	0.00	
53.91	2786	0.0	0	0.00	
54.15	2203	0.0	0	0.00	
54.56	4570	0.0	0	0.00	
54.86	2305	0.0	0	0.00	
55.09	2377	0.0	0	0.00	
55.54	3679	0.0	0	0.00	
55.89	158870	25.0	500	5.00	1,3-DCB
56.38	185063	25.0	500	5.00	1,4-DCB
56.99	6145	0.0	0	0.00	
57.39	3047	0.0	0	0.00	
57.94	133292	25.0	500	5.00	1,2-DCB
58.50	1537	0.0	0	0.00	
58.64	1874	0.0	0	0.00	
58.79	2580	0.0	0	0.00	
59.14	2794	0.0	0	0.00	
59.56	2072	0.0	0	0.00	
59.89	3787	0.0	0	0.00	
60.27	1114	0.0	0	0.00	
60.61	5013	0.0	0	0.00	
60.99	1806	0.0	0	0.00	
61.27	7991	25.0	500	5.00	1,2-DBr-3-CPA
61.45	3811	0.0	0	0.00	
61.84	3224	0.0	0	0.00	
62.18	1863	0.0	0	0.00	
62.51	1357	0.0	0	0.00	
62.76	3407	0.0	0	0.00	
63.27	6071	0.0	0	0.00	
63.57	1207	0.0	0	0.00	
63.74	3303	0.0	0	0.00	
64.22	100807	25.0	500	5.00	1,2,4-TCB
64.65	150941	25.0	500	5.00	HEXACLBTADIENE
65.13	3796	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.05
Method : c:\ezchrom\voatemp\1voa0527.met
Sample ID : 5.0 ppb 5
Acquired : May 27, 1996 19:29:49
Printed : May 29, 1996 16:03:53

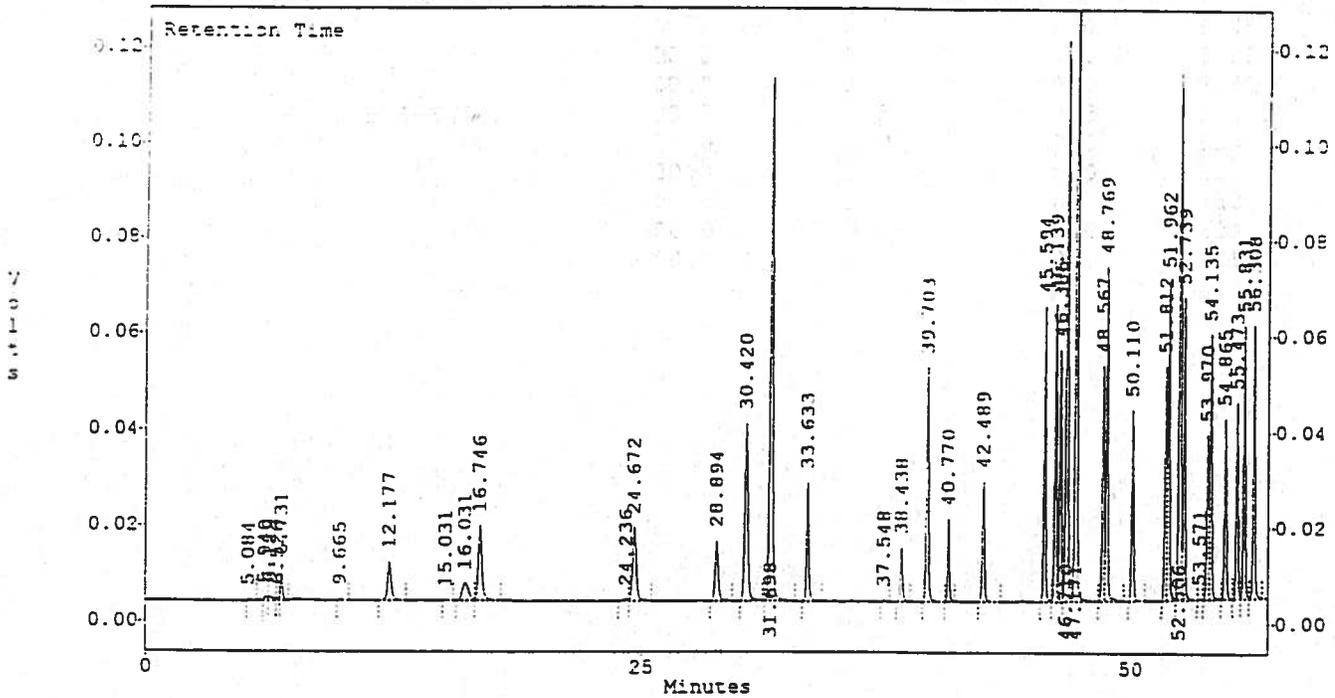
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
65.29	3078	0.0	0	0.00	
65.45	2058	0.0	0	0.00	
65.58	2562	0.0	0	0.00	
65.79	61578	25.0	500	5.00	1,2,3-TCE
66.23	3058	0.0	0	0.00	
66.38	1951	0.0	0	0.00	
66.58	5586	0.0	0	0.00	
66.91	458	0.0	0	0.00	
67.03	304	0.0	0	0.00	

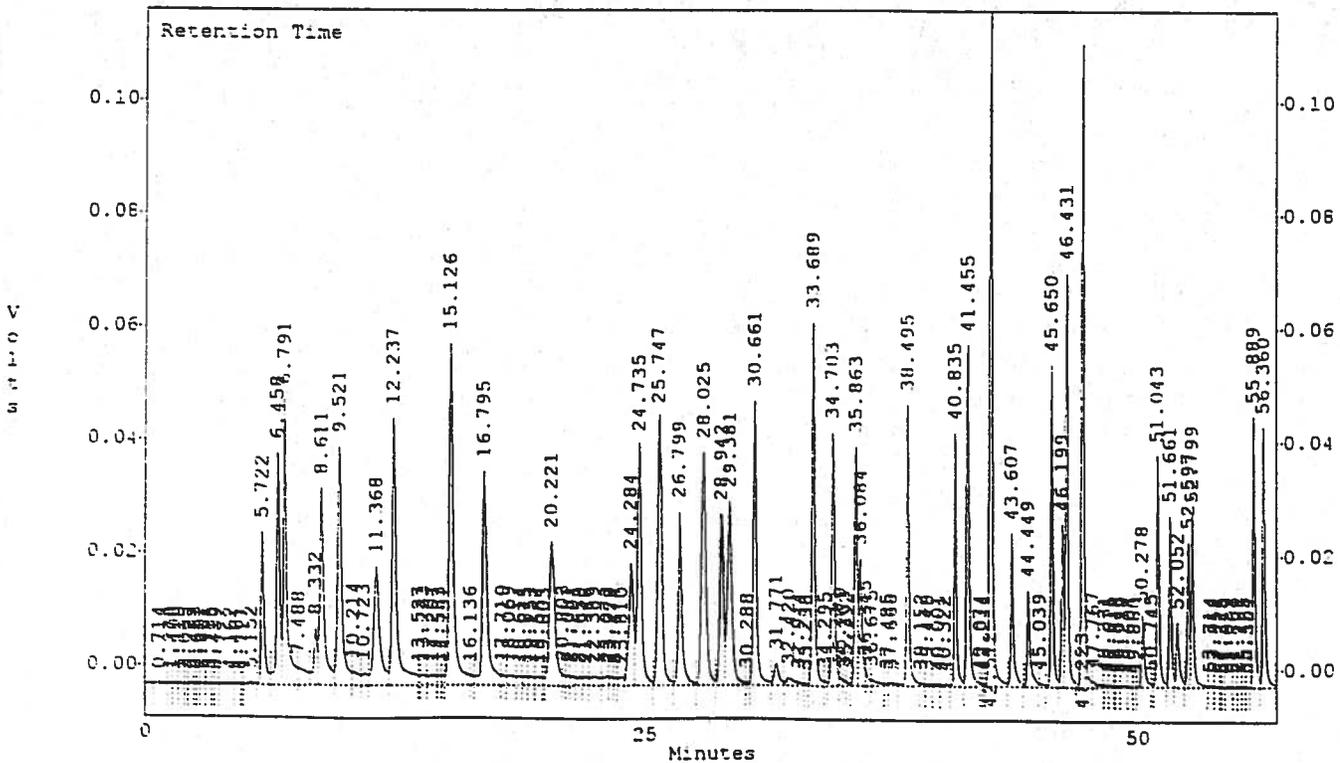
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.06
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 10.0 ppb 6
 Acquired : May 27, 1996 20:59:43
 Printed : May 29, 1996 16:04:17

c:\ezchrom\voatemp\160527.06 -- Channel A



c:\ezchrom\voatemp\160527.06 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.06
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 10.0 ppb 6
 Acquired : May 27, 1996 20:59:43
 Printed : May 29, 1996 16:04:19

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.09	2040	0.0	0	0.00	
5.94	8220	0.0	0	0.00	
6.13	13136	0.0	0	0.00	
6.53	4493	0.0	0	0.00	
6.73	39526	50.0	1000	10.00	Vinyl Chloride
9.66	2288	0.0	0	0.00	
12.18	103664	50.0	1000	10.00	1,1-dce
15.03	2188	0.0	0	0.00	
16.03	85828	50.0	1000	10.00	Mtbe
16.75	204713	50.0	1000	10.00	Trans 1,2-dce
24.24	5905	0.0	0	0.00	
24.67	195910	50.0	1000	10.00	Cis 1,2-dce
28.89	148152	50.0	1000	10.00	1,1-dcpe
30.42	414793	50.0	1000	10.00	Benzene
31.70	1136074	5.0	100	1.00	Flbenzene (IS)
33.63	224531	50.0	1000	10.00	Tce
37.55	2193	0.0	0	0.00	
38.44	82109	50.0	1000	10.00	Cis 1,3-dcpe
39.70	390063	50.0	1000	10.00	Toluene
40.77	111258	50.0	1000	10.00	Trans 1,3-dcpe
42.49	188587	50.0	1000	10.00	Pce
45.59	398016	500.0	10000	100.00	1cl4fbz (surr)
46.14	406437	50.0	1000	10.00	Chlorobenzene
46.39	369812	50.0	1000	10.00	Ethylbenzene
46.71	828385	100.0	2000	20.00	M/P Xylene
47.17	1142026	5.0	100	1.00	1cl2flbz (IS)
48.57	336493	50.0	1000	10.00	O Xylene
48.77	464007	50.0	1000	10.00	Styrene
50.11	288342	50.0	1000	10.00	Isopropylbenzene
51.81	312148	50.0	1000	10.00	n-propylbenzene
51.96	432885	50.0	1000	10.00	Bromobenzene
52.51	836972	100.0	2000	20.00	1,3,5-tmb/2-cl tol
52.74	397540	50.0	1000	10.00	4-cl toluene
53.57	2009	0.0	0	0.00	
53.97	241992	50.0	1000	10.00	t-butylbenzene
54.13	377048	50.0	1000	10.00	1,2,4-tmb
54.87	270464	50.0	1000	10.00	s-butylbenzene
55.47	273761	50.0	1000	10.00	p-isopropyltoluene
55.83	353147	50.0	1000	10.00	1,3-dcb
56.31	345294	50.0	1000	10.00	1,4-dcb
57.21	286432	50.0	1000	10.00	n-butylbenzene
57.86	285031	50.0	1000	10.00	1,2-dcb
60.14	4878	0.0	0	0.00	
63.23	4848	0.0	0	0.00	
64.15	182010	50.0	1000	10.00	1,2,4-tcb
64.59	118831	50.0	1000	10.00	Hexachlorobutadiene
64.99	253095	50.0	1000	10.00	Napthalene
65.73	168055	50.0	1000	10.00	1,2,3-tcb
66.33	4004	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.06
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 10.0 ppb 6
 Acquired : May 27, 1996 20:59:43
 Printed : May 29, 1996 16:04:19

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
0.71	4045	0.0	0	0.00	
1.28	2144	0.0	0	0.00	
1.41	2368	0.0	0	0.00	
1.72	2633	0.0	0	0.00	
2.01	667	0.0	0	0.00	
2.23	2285	0.0	0	0.00	
2.46	1028	0.0	0	0.00	
2.61	1021	0.0	0	0.00	
2.80	2340	0.0	0	0.00	
3.19	2272	0.0	0	0.00	
3.31	733	0.0	0	0.00	
3.46	1475	0.0	0	0.00	
4.16	4757	0.0	0	0.00	
4.46	2068	0.0	0	0.00	
4.72	683	0.0	0	0.00	
5.15	8357	0.0	0	0.00	
5.72	282491	50.0	1000	10.00	DCDFM
6.46	453054	50.0	1000	10.00	CHLOROMETHANE
6.79	583431	50.0	1000	10.00	VINYL CHLORIDE
7.49	90932	0.0	0	0.00	
8.33	127683	50.0	1000	10.00	BROMOMETHANE
8.61	536612	50.0	1000	10.00	CHLOROETHANE
9.52	661345	50.0	1000	10.00	TCFM
10.21	58683	0.0	0	0.00	
10.72	46399	0.0	0	0.00	
11.37	460305	50.0	1000	10.00	FREON 113
12.24	777558	50.0	1000	10.00	1,1-DCE
13.53	9491	0.0	0	0.00	
13.73	36266	0.0	0	0.00	
14.21	52000	0.0	0	0.00	
14.53	22324	0.0	0	0.00	
14.75	16903	0.0	0	0.00	
15.13	969432	50.0	1000	10.00	METH CHLORIDE
16.14	17255	0.0	0	0.00	
16.79	664977	50.0	1000	10.00	TRANS 1,2-DCE
17.71	30561	0.0	0	0.00	
18.07	49089	0.0	0	0.00	
18.61	27576	0.0	0	0.00	
18.87	26573	0.0	0	0.00	
19.15	31654	0.0	0	0.00	
19.56	32303	0.0	0	0.00	
19.80	12112	0.0	0	0.00	
20.22	537027	50.0	1000	10.00	1,1-DCA
20.80	23566	0.0	0	0.00	
21.08	22789	0.0	0	0.00	
21.26	26523	0.0	0	0.00	
21.66	31062	0.0	0	0.00	
21.95	31562	0.0	0	0.00	
22.39	55723	0.0	0	0.00	
23.07	37788	0.0	0	0.00	
23.23	23286	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.06
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 10.0 ppb 6
 Acquired : May 27, 1996 20:59:43
 Printed : May 29, 1996 16:04:19

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
23.47	16582	0.0	0	0.00	
23.81	30401	0.0	0	0.00	
24.28	369659	50.0	1000	10.00	2,2-DCPA
24.74	652611	50.0	1000	10.00	CIS 1,2-DCE
25.75	743562	50.0	1000	10.00	CHLOROFORM
26.80	399950	50.0	1000	10.00	BCM
29.03	693656	50.0	1000	10.00	1,1,1-TCA
29.94	406653	50.0	1000	10.00	1,1-DCPE
29.38	554768	50.0	1000	10.00	CARBON TET
30.29	5558	0.0	0	0.00	
30.66	588548	50.0	1000	10.00	1,2-DCA
31.77	70762	0.0	0	0.00	
32.42	39915	50.0	1000	10.00	2-CL ETH VI ETH
32.94	8665	0.0	0	0.00	
33.30	4224	0.0	0	0.00	
33.69	677215	50.0	1000	10.00	TCE
34.30	8641	0.0	0	0.00	
34.70	491103	50.0	1000	10.00	1,2-DCPA
35.08	15713	0.0	0	0.00	
35.26	8716	0.0	0	0.00	
35.39	6809	0.0	0	0.00	
35.86	392870	50.0	1000	10.00	BRDCLMETHANE
36.08	257420	50.0	1000	10.00	DIBROMOMETHANE
36.35	28433	0.0	0	0.00	
36.67	29764	0.0	0	0.00	
37.48	6131	0.0	0	0.00	
37.67	13201	0.0	0	0.00	
38.49	439842	50.0	1000	10.00	CIS 1,3-DCPE
39.15	7478	0.0	0	0.00	
39.45	7574	0.0	0	0.00	
40.00	8566	0.0	0	0.00	
40.32	9143	0.0	0	0.00	
40.83	369172	50.0	1000	10.00	TRANS 1,3-DCPE
41.46	567764	50.0	1000	10.00	1,1,2-TCA
42.07	4210	0.0	0	0.00	
42.24	4295	0.0	0	0.00	
42.57	1236606	100.0	2000	20.00	1,3 DCPA/PCE
43.61	266809	50.0	1000	10.00	DIBRCLMETHANE
44.45	191608	50.0	1000	10.00	1,2-DBEA (EDB)
45.04	10483	0.0	0	0.00	
45.65	462928	500.0	10000	100.00	1CL4FBZ (SURR)
46.20	231361	50.0	1000	10.00	CHLOROBENZENE
46.43	672209	50.0	1000	10.00	1,1,1,2-PCA
47.22	981342	5.0	100	1.00	1CL2FBZ (IS)
47.77	20534	0.0	0	0.00	
48.33	6002	0.0	0	0.00	
48.62	5191	0.0	0	0.00	
48.85	1394	0.0	0	0.00	
49.04	3676	0.0	0	0.00	
49.28	5858	0.0	0	0.00	
49.60	2136	0.0	0	0.00	
49.86	851	0.0	0	0.00	
50.28	127634	50.0	1000	10.00	BROMOFORM

Continued...

File : c:\ezchrom\voatemp\160527.06
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 10.0 ppb 6
 Acquired : May 27, 1996 20:59:43
 Printed : May 29, 1996 16:04:20

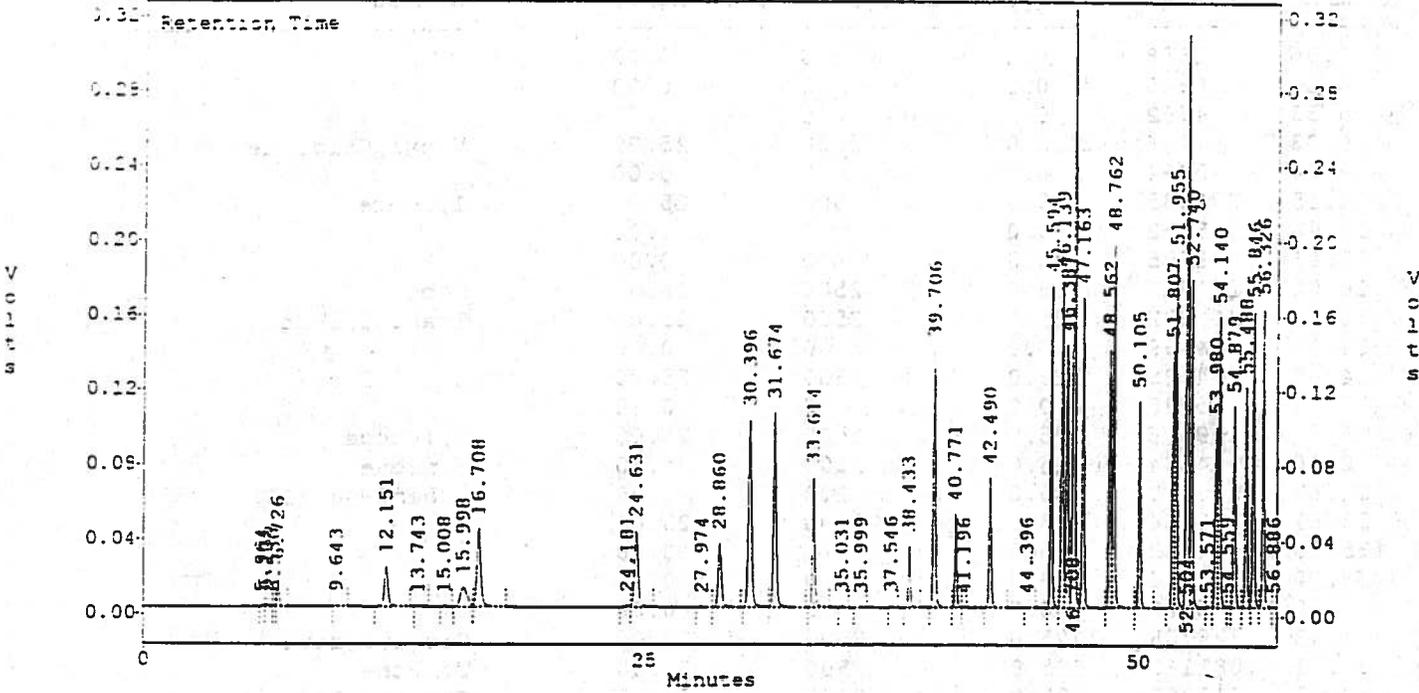
Channel E Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
50.75	4784	0.0	0	0.00	
51.04	355133	50.0	1000	10.00	1,1,2,2-PCA
51.66	253826	50.0	1000	10.00	1,2,3-TCPA
52.05	127207	50.0	1000	10.00	BROMOBENZENE
52.60	198474	50.0	1000	10.00	2-CL TOLUENE
52.80	263696	50.0	1000	10.00	4-CL TOLUENE
53.71	5495	0.0	0	0.00	
53.95	3550	0.0	0	0.00	
54.22	576	0.0	0	0.00	
54.35	807	0.0	0	0.00	
54.56	4267	0.0	0	0.00	
54.86	982	0.0	0	0.00	
55.13	2856	0.0	0	0.00	
55.42	2007	0.0	0	0.00	
55.55	1811	0.0	0	0.00	
55.89	362679	50.0	1000	10.00	1,3-DCB
56.36	398141	50.0	1000	10.00	1,4-DCB
57.03	7465	0.0	0	0.00	
57.43	3744	0.0	0	0.00	
57.93	333889	50.0	1000	10.00	1,2-DCB
58.75	1631	0.0	0	0.00	
58.88	2650	0.0	0	0.00	
59.30	2424	0.0	0	0.00	
59.68	2097	0.0	0	0.00	
59.87	2334	0.0	0	0.00	
60.25	1843	0.0	0	0.00	
60.41	995	0.0	0	0.00	
60.57	1204	0.0	0	0.00	
60.94	3629	0.0	0	0.00	
61.03	1352	0.0	0	0.00	
61.23	38455	50.0	1000	10.00	1,2-DBr-3-CPA
61.72	4831	0.0	0	0.00	
61.99	1861	0.0	0	0.00	
62.18	2027	0.0	0	0.00	
62.32	1744	0.0	0	0.00	
62.51	1473	0.0	0	0.00	
62.78	3299	0.0	0	0.00	
63.12	2559	0.0	0	0.00	
63.29	3650	0.0	0	0.00	
63.52	2053	0.0	0	0.00	
63.80	929	0.0	0	0.00	
64.21	242890	50.0	1000	10.00	1,2,4-TCB
64.64	345749	50.0	1000	10.00	HEXACL BUTADIENE
65.57	5665	0.0	0	0.00	
65.78	218230	50.0	1000	10.00	1,2,3-TCB
66.39	3139	0.0	0	0.00	
66.65	4293	0.0	0	0.00	
67.07	484	0.0	0	0.00	

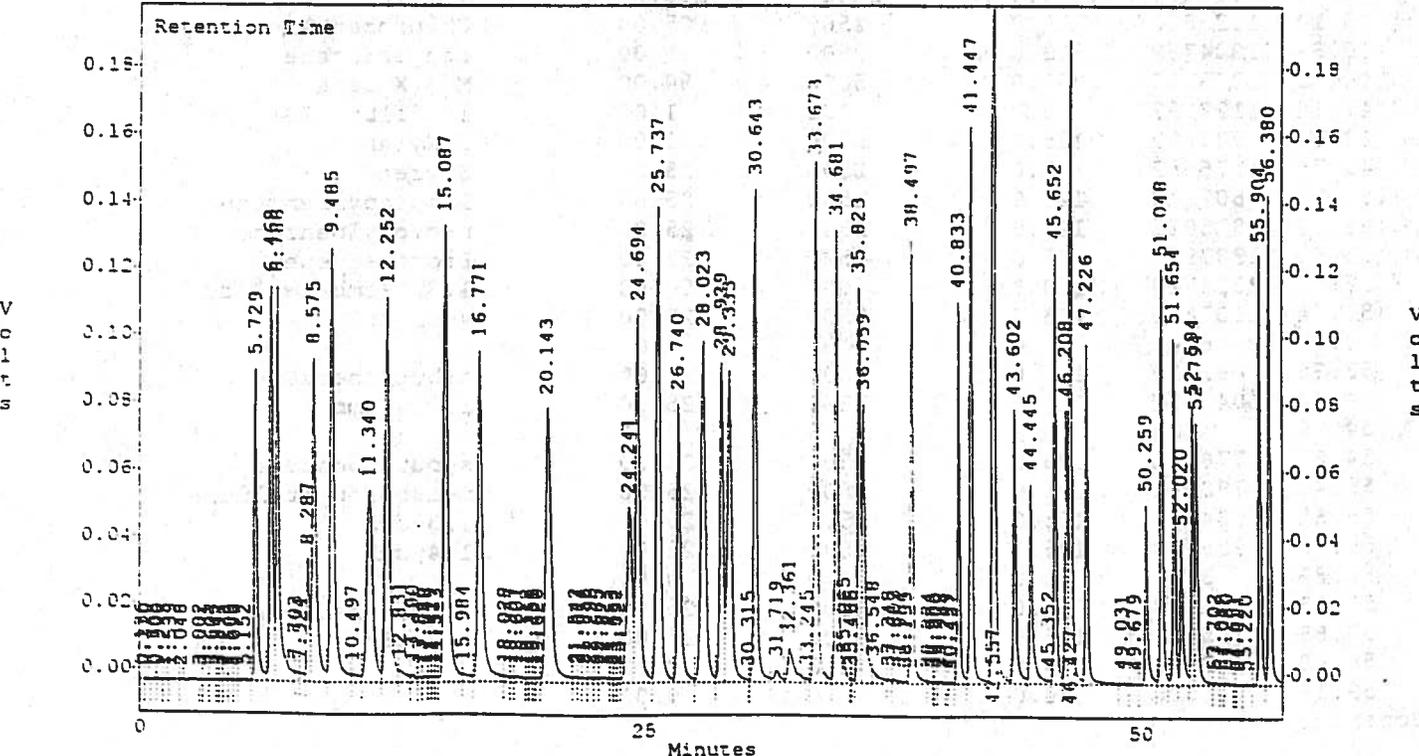
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.07
 Method : c:\ezchrom\voatemp\1voa0527.mec
 Sample ID : 25.0 ppb 7
 Acquired : May 27, 1996 22:30:57
 Printed : May 29, 1996 16:04:41

c:\ezchrom\voatemp\160527.07 -- Channel A



c:\ezchrom\voatemp\160527.07 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.07
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 25.0 ppb 7
 Acquired : May 27, 1996 22:30:57
 Printed : May 29, 1996 16:04:43

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
5.96	6258	0.0	0	0.00	
6.14	18340	0.0	0	0.00	
6.53	4762	0.0	0	0.00	
6.73	97756	125.0	2500	25.00	Vinyl Chloride
9.64	5494	0.0	0	0.00	
12.15	278235	125.0	2500	25.00	1,1-dce
13.74	5852	0.0	0	0.00	
15.01	5725	0.0	0	0.00	
16.00	241711	125.0	2500	25.00	Mtbe
16.71	566922	125.0	2500	25.00	Trans 1,2-dce
24.18	14899	0.0	0	0.00	
24.63	534628	125.0	2500	25.00	Cis 1,2-dce
27.97	5938	0.0	0	0.00	
28.86	409026	125.0	2500	25.00	1,1-dcpe
30.40	1144884	125.0	2500	25.00	Benzene
31.67	1083021	5.0	100	1.00	Flbenzene (IS)
33.61	621164	125.0	2500	25.00	Tce
35.03	4132	0.0	0	0.00	
36.00	2236	0.0	0	0.00	
37.55	6128	0.0	0	0.00	
38.43	235788	125.0	2500	25.00	Cis 1,3-dcpe
39.71	1081168	125.0	2500	25.00	Toluene
40.77	318380	125.0	2500	25.00	Trans 1,3-dcpe
41.20	3615	0.0	0	0.00	
42.49	526483	125.0	2500	25.00	Pce
44.40	6089	0.0	0	0.00	
45.59	1101097	1250.0	25000	250.00	1cl4fbz (surr)
46.14	1125863	125.0	2500	25.00	Chlorobenzene
46.39	1004769	125.0	2500	25.00	Ethylbenzene
46.71	2273330	250.0	5000	50.00	M/P Xylene
47.16	1122392	5.0	100	1.00	1cl2flbz (IS)
48.56	937252	125.0	2500	25.00	O Xylene
48.76	1276652	125.0	2500	25.00	Styrene
50.10	802219	125.0	2500	25.00	Isopropylbenzene
51.81	875025	125.0	2500	25.00	n-propylbenzene
51.96	1207975	125.0	2500	25.00	Bromobenzene
52.50	2324128	250.0	5000	50.00	1,3,5-tmb/2-cl tol
52.74	1107666	125.0	2500	25.00	4-cl toluene
53.57	6945	0.0	0	0.00	
53.98	691419	125.0	2500	25.00	t-butylbenzene
54.14	1043811	125.0	2500	25.00	1,2,4-tmb
54.56	4234	0.0	0	0.00	
54.88	776726	125.0	2500	25.00	s-butylbenzene
55.49	783644	125.0	2500	25.00	p-isopropyltoluene
55.85	984269	125.0	2500	25.00	1,3-dcb
56.33	959930	125.0	2500	25.00	1,4-dcb
56.89	3254	0.0	0	0.00	
57.23	835238	125.0	2500	25.00	n-butylbenzene
57.88	795102	125.0	2500	25.00	1,2-dcb
58.60	2091	0.0	0	0.00	
59.16	2526	0.0	0	0.00	

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File : c:\ezchrom\voatemp\160527.07
Method : c:\ezchrom\voatemp\lvoa0527.met
Sample ID : 25.0 ppb 7
Acquired : May 27, 1996 22:30:57
Printed : May 29, 1996 16:04:43

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
60.16	5424	0.0	0	0.00	
61.20	2772	0.0	0	0.00	
64.16	540575	125.0	2500	25.00	1,2,4-tcb
64.59	402704	125.0	2500	25.00	Hexachlorobutadiene
64.98	713058	125.0	2500	25.00	Napthalene
65.73	495365	125.0	2500	25.00	1,2,3-tcb
66.33	2302	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.07
 Method : c:\ezchrom\voatemp\lvca0527.met
 Sample ID : 25.0 ppb 7
 Acquired : May 27, 1996 22:30:57
 Printed : May 29, 1996 16:04:44

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln(µg/l)	Compound
0.14	753	0.0	0	0.00	
0.31	433	0.0	0	0.00	
0.80	1359	0.0	0	0.00	
0.90	1549	0.0	0	0.00	
1.23	637	0.0	0	0.00	
1.54	2254	0.0	0	0.00	
2.05	783	0.0	0	0.00	
3.00	496	0.0	0	0.00	
3.23	881	0.0	0	0.00	
3.60	3024	0.0	0	0.00	
3.85	636	0.0	0	0.00	
4.00	681	0.0	0	0.00	
4.24	1797	0.0	0	0.00	
4.50	2568	0.0	0	0.00	
4.70	1656	0.0	0	0.00	
5.15	7403	0.0	0	0.00	
5.73	894909	125.0	2500	25.00	DCDFM
6.47	1217951	125.0	2500	25.00	CHLOROMETHANE
6.79	1274371	125.0	2500	25.00	VINYL CHLORIDE
7.70	38567	0.0	0	0.00	
7.92	39228	0.0	0	0.00	
8.29	347156	125.0	2500	25.00	BROMOMETHANE
8.57	1318021	125.0	2500	25.00	CHLOROETHANE
9.48	1863209	125.0	2500	25.00	TCFM
10.50	61455	0.0	0	0.00	
11.34	1238113	125.0	2500	25.00	FREON 113
12.25	1699185	125.0	2500	25.00	1,1-DCE
12.83	90540	0.0	0	0.00	
13.49	33934	0.0	0	0.00	
13.85	20057	0.0	0	0.00	
14.08	23736	0.0	0	0.00	
14.33	14994	0.0	0	0.00	
14.43	15016	0.0	0	0.00	
14.57	13453	0.0	0	0.00	
15.09	2166032	125.0	2500	25.00	METH CHLORIDE
15.98	57785	0.0	0	0.00	
16.77	1631697	125.0	2500	25.00	TRANS 1,2-DCE
18.03	33183	0.0	0	0.00	
18.34	15794	0.0	0	0.00	
18.61	52329	0.0	0	0.00	
19.12	15210	0.0	0	0.00	
19.35	14009	0.0	0	0.00	
19.44	11591	0.0	0	0.00	
19.62	20427	0.0	0	0.00	
20.14	1752544	125.0	2500	25.00	1,1-DCA
21.54	23156	0.0	0	0.00	
21.67	22696	0.0	0	0.00	
21.96	26373	0.0	0	0.00	
22.30	27851	0.0	0	0.00	
22.67	21336	0.0	0	0.00	
22.88	49431	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.07
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 25.0 ppb 7
 Acquired : May 27, 1996 22:30:57
 Printed : May 29, 1996 16:04:44

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
23.35	14904	0.0	0	0.00	
23.55	13346	0.0	0	0.00	
23.73	16461	0.0	0	0.00	
24.24	967489	125.0	2500	25.00	2,2-DCPA
24.69	1688437	125.0	2500	25.00	CIS 1,2-DCE
25.74	2057381	125.0	2500	25.00	CHLOROFORM
26.74	1137389	125.0	2500	25.00	BCM
28.02	1698379	125.0	2500	25.00	1,1,1-TCA
28.93	1175578	125.0	2500	25.00	1,1-DCPE
29.33	1493740	125.0	2500	25.00	CARBON TET
30.31	3578	0.0	0	0.00	
30.64	1651764	125.0	2500	25.00	1,2-DCA
31.72	74189	0.0	0	0.00	
32.36	250986	125.0	2500	25.00	2-CL ETH VI ETH
33.25	9446	0.0	0	0.00	
33.67	1715459	125.0	2500	25.00	TCE
34.68	1407902	125.0	2500	25.00	1,2-DCPA
35.07	68672	0.0	0	0.00	
35.40	5296	0.0	0	0.00	
35.47	6996	0.0	0	0.00	
35.82	1104971	125.0	2500	25.00	BRDCLMETHANE
36.06	966429	125.0	2500	25.00	DIBROMOMETHANE
36.55	86239	0.0	0	0.00	
37.35	14365	0.0	0	0.00	
37.60	16542	0.0	0	0.00	
37.95	7267	0.0	0	0.00	
38.20	7684	0.0	0	0.00	
38.50	1185882	125.0	2500	25.00	CIS 1,3-DCPE
39.33	9363	0.0	0	0.00	
39.55	2013	0.0	0	0.00	
39.70	3450	0.0	0	0.00	
39.94	9193	0.0	0	0.00	
40.30	1538	0.0	0	0.00	
40.46	3631	0.0	0	0.00	
40.83	926146	125.0	2500	25.00	TRANS 1,3-DCPE
41.45	1522192	125.0	2500	25.00	1,1,2-TCA
42.56	3152989	250.0	5000	50.00	1,3 DCPA/PCE
43.60	850042	125.0	2500	25.00	DIBRCLMETHANE
44.45	627648	125.0	2500	25.00	1,2-DBEA (EDB)
45.35	10731	0.0	0	0.00	
45.65	1037481	1250.0	25000	250.00	1CL4FBZ (SURR)
46.21	624422	125.0	2500	25.00	CHLOROBENZENE
46.43	1860430	125.0	2500	25.00	1,1,1,2-PCA
47.23	896191	5.0	100	1.00	1CL2FBZ (IS)
49.03	12694	0.0	0	0.00	
49.68	7532	0.0	0	0.00	
50.26	483866	125.0	2500	25.00	BROMOFORM
51.05	1066935	125.0	2500	25.00	1,1,2,2-PCA
51.65	806247	125.0	2500	25.00	1,2,3-TCPA
52.02	446308	125.0	2500	25.00	BROMOBENZENE
52.59	648100	125.0	2500	25.00	2-CL TOLUENE
52.79	698420	125.0	2500	25.00	4-CL TOLUENE
53.70	11291	0.0	0	0.00	

Continued...

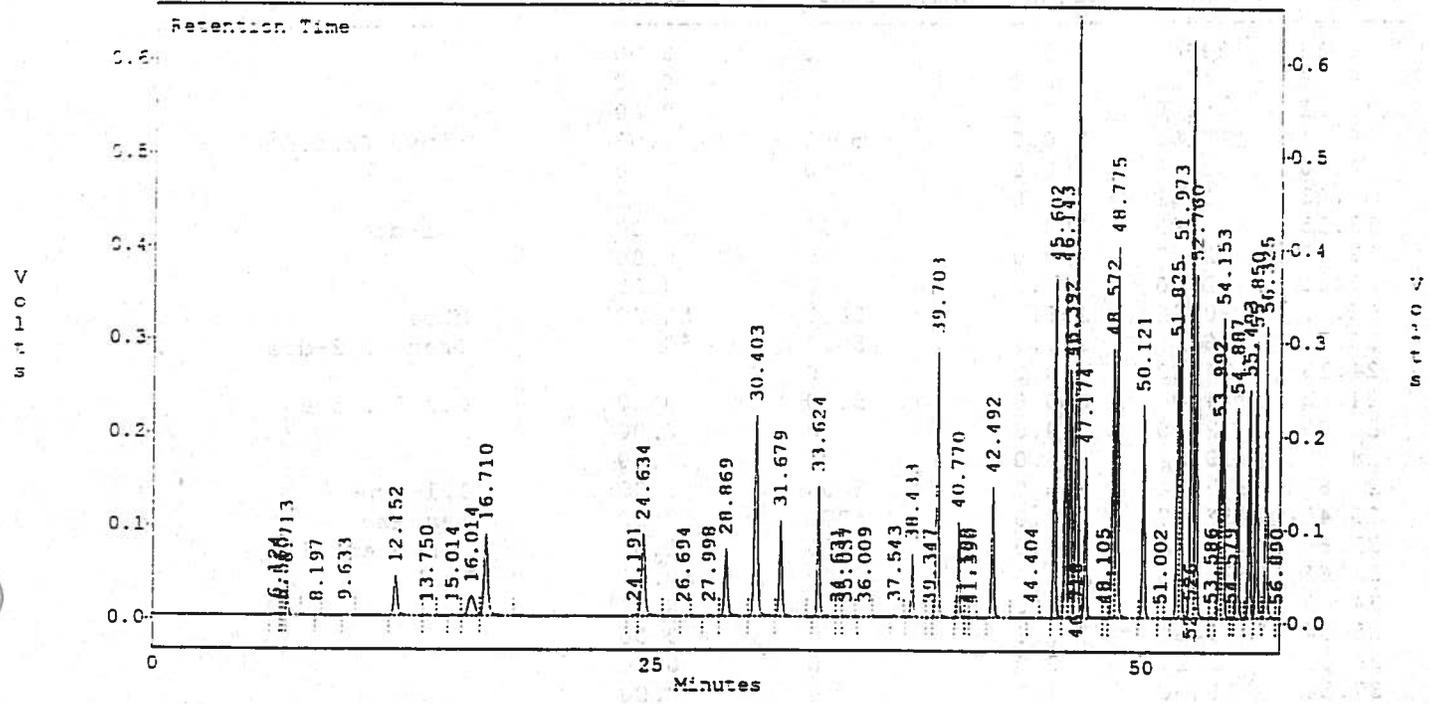
File .. : c:\ezchrom\voatemp\160527.07
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 25.0 ppb 7
 Acquired : May 27, 1996 22:30:57
 Printed : May 29, 1996 16:04:44

Channel B Results

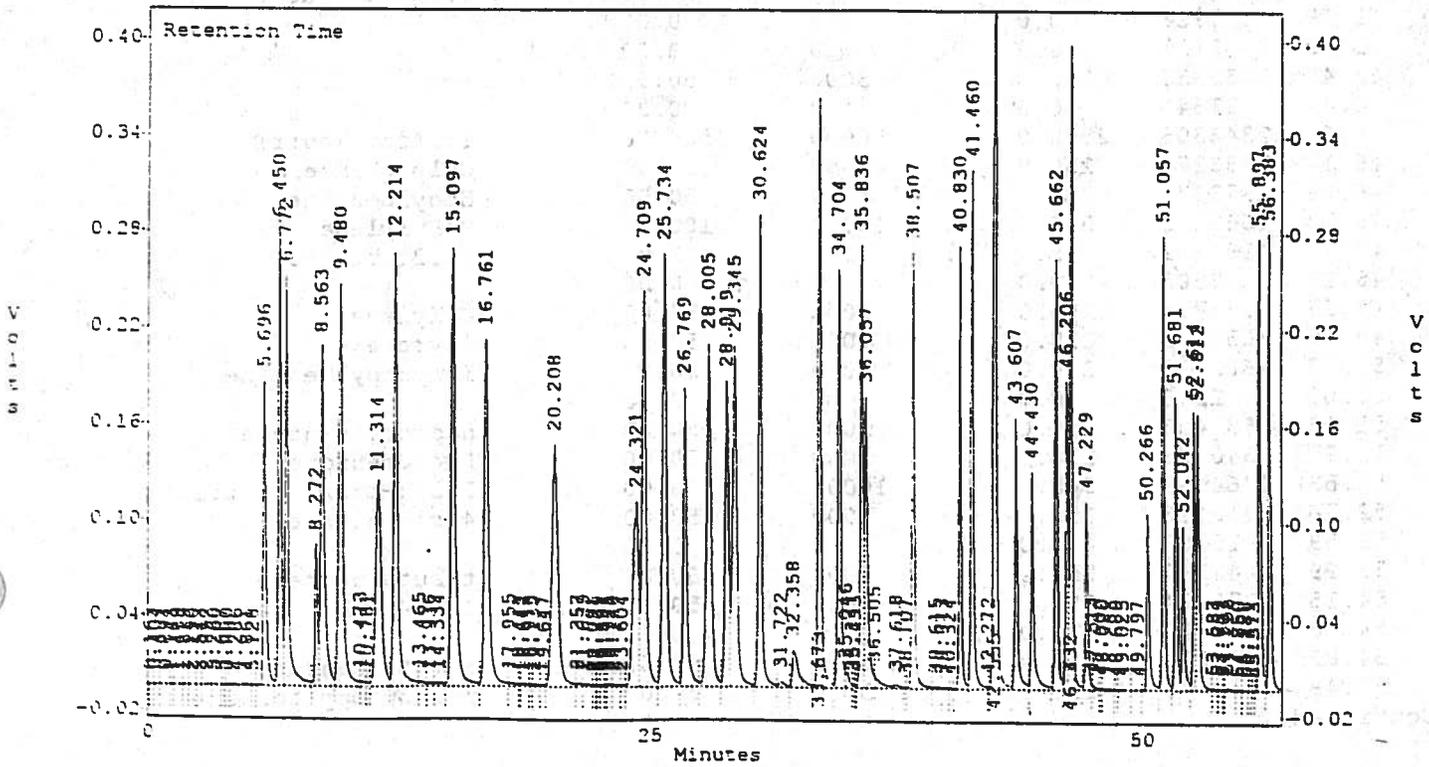
RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
54.04	5539	0.0	0	0.00	
54.28	9959	0.0	0	0.00	
54.65	1505	0.0	0	0.00	
54.81	2463	0.0	0	0.00	
55.22	3934	0.0	0	0.00	
55.90	960115	125.0	2500	25.00	1,3-DCB
56.38	1139854	125.0	2500	25.00	1,4-DCB
57.36	9213	0.0	0	0.00	
57.94	861001	125.0	2500	25.00	1,2-DCB
58.79	3395	0.0	0	0.00	
58.94	2941	0.0	0	0.00	
59.06	4758	0.0	0	0.00	
59.73	2664	0.0	0	0.00	
60.02	1623	0.0	0	0.00	
60.54	3527	0.0	0	0.00	
60.77	1421	0.0	0	0.00	
61.02	2322	0.0	0	0.00	
61.25	169160	125.0	2500	25.00	1,2-DBr-3-CPA
62.08	4751	0.0	0	0.00	
62.29	1597	0.0	0	0.00	
62.44	1768	0.0	0	0.00	
62.67	2574	0.0	0	0.00	
62.86	1797	0.0	0	0.00	
63.31	2146	0.0	0	0.00	
63.53	1895	0.0	0	0.00	
63.94	8773	0.0	0	0.00	
64.21	872986	125.0	2500	25.00	1,2,4-TCB
64.64	1256890	125.0	2500	25.00	HEXACLBTADIENE
65.51	3383	0.0	0	0.00	
65.78	765899	125.0	2500	25.00	1,2,3-TCB
66.56	1805	0.0	0	0.00	
66.78	1140	0.0	0	0.00	
66.93	479	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles
 File : c:\ezchrom\voatemp\160527.08
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 50.0 ppb 8
 Acquired : May 27, 1996 23:59:56
 Printed : May 29, 1996 16:05:07

c:\ezchrom\voatemp\160527.08 -- Channel A



c:\ezchrom\voatemp\160527.08 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.08
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 50.0 ppb 8
 Acquired : May 27, 1996 23:59:56
 Printed : May 29, 1996 16:05:08

Channel A Results

RT (min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
6.12	29948	0.0	0	0.00	
6.36	4611	0.0	0	0.00	
6.51	5300	0.0	0	0.00	
6.71	218180	250.0	5000	50.00	Vinyl Chloride
8.20	2049	0.0	0	0.00	
9.63	11052	0.0	0	0.00	
12.15	560490	250.0	5000	50.00	1,1-dce
13.75	12642	0.0	0	0.00	
15.01	12010	0.0	0	0.00	
16.01	490122	250.0	5000	50.00	Mtbe
16.71	1176085	250.0	5000	50.00	Trans 1,2-dce
24.19	27042	0.0	0	0.00	
24.63	1141000	250.0	5000	50.00	Cis 1,2-dce
26.69	2800	0.0	0	0.00	
28.00	13082	0.0	0	0.00	
28.87	877124	250.0	5000	50.00	1,1-dcpe
30.40	2437647	250.0	5000	50.00	Benzene
31.68	1079972	5.0	100	1.00	Flbenzene (IS)
33.62	1310505	250.0	5000	50.00	Tce
34.63	3106	0.0	0	0.00	
35.04	9491	0.0	0	0.00	
36.01	3824	0.0	0	0.00	
37.54	18490	0.0	0	0.00	
38.43	498947	250.0	5000	50.00	Cis 1,3-dcpe
39.35	2444	0.0	0	0.00	
39.70	2290712	250.0	5000	50.00	Toluene
40.77	663361	250.0	5000	50.00	Trans 1,3-dcpe
41.19	7928	0.0	0	0.00	
41.39	3125	0.0	0	0.00	
42.49	1083333	250.0	5000	50.00	Pce
44.40	11346	0.0	0	0.00	
45.60	2343308	2500.0	50000	500.00	1cl4fbz (surr)
46.14	2388178	250.0	5000	50.00	Chlorobenzene
46.39	1973374	250.0	5000	50.00	Ethylbenzene
46.72	4667403	500.0	10000	100.00	M/P Xylene
47.17	1181182	5.0	100	1.00	1cl2flbz (IS)
48.10	2505	0.0	0	0.00	
48.57	1983795	250.0	5000	50.00	O Xylene
48.78	2655281	250.0	5000	50.00	Styrene
50.12	1662319	250.0	5000	50.00	Isopropylbenzene
51.00	2245	0.0	0	0.00	
51.83	1837406	250.0	5000	50.00	n-propylbenzene
51.97	2540803	250.0	5000	50.00	Bromobenzene
52.53	4764632	500.0	10000	100.00	1,3,5-tmb/2-cl tol
52.76	2318723	250.0	5000	50.00	4-cl toluene
53.59	15503	0.0	0	0.00	
53.99	1448567	250.0	5000	50.00	t-butylbenzene
54.15	2179404	250.0	5000	50.00	1,2,4-tmb
54.58	9320	0.0	0	0.00	
54.89	1630673	250.0	5000	50.00	s-butylbenzene
55.49	1643772	250.0	5000	50.00	p-isopropyltoluene

Continued...

File : c:\ezchrom\voatemp\160527.08
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 50.0 ppb 8
 Acquired : May 27, 1996 23:59:56
 Printed : May 29, 1996 16:05:09

Channel A Results

T(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
55.85	1944138	250.0	5000	50.00	1,3-dcb
56.32	1938236	250.0	5000	50.00	1,4-dcb
56.89	7497	0.0	0	0.00	
57.23	1742944	250.0	5000	50.00	n-butylbenzene
57.88	1587373	250.0	5000	50.00	1,2-dcb
58.61	4922	0.0	0	0.00	
59.15	2892	0.0	0	0.00	
60.15	4189	0.0	0	0.00	
61.20	4880	0.0	0	0.00	
61.65	2286	0.0	0	0.00	
63.21	4000	0.0	0	0.00	
64.16	990591	250.0	5000	50.00	1,2,4-tcb
64.59	705089	250.0	5000	50.00	Hexachlorobutadiene
64.99	1340523	250.0	5000	50.00	Napthalene
65.74	840177	250.0	5000	50.00	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.08
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 50.0 ppb 8
 Acquired : May 27, 1996 23:59:56
 Printed : May 29, 1996 16:05:09

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
0.16	918	0.0	0	0.00	
0.40	1560	0.0	0	0.00	
0.89	2325	0.0	0	0.00	
1.14	406	0.0	0	0.00	
1.49	2293	0.0	0	0.00	
1.82	1163	0.0	0	0.00	
2.19	1556	0.0	0	0.00	
2.54	1278	0.0	0	0.00	
2.89	2955	0.0	0	0.00	
3.26	3452	0.0	0	0.00	
3.66	913	0.0	0	0.00	
3.85	1763	0.0	0	0.00	
4.29	4485	0.0	0	0.00	
4.86	6719	0.0	0	0.00	
5.13	2108	0.0	0	0.00	
5.70	1919696	250.0	5000	50.00	DCDFM
6.45	2636397	250.0	5000	50.00	CHLOROMETHANE
6.77	2656099	250.0	5000	50.00	VINYL CHLORIDE
8.27	842729	250.0	5000	50.00	BROMOMETHANE
8.56	2846635	250.0	5000	50.00	CHLOROETHANE
9.48	3656627	250.0	5000	50.00	TCFM
10.47	50050	0.0	0	0.00	
10.78	25429	0.0	0	0.00	
11.31	2659440	250.0	5000	50.00	FREON 113
12.21	3796717	250.0	5000	50.00	1,1-DCE
13.47	53036	0.0	0	0.00	
13.94	42113	0.0	0	0.00	
14.33	59793	0.0	0	0.00	
15.10	4387828	250.0	5000	50.00	METH CHLORIDE
16.76	3486080	250.0	5000	50.00	TRANS 1,2-DCE
17.95	62597	0.0	0	0.00	
18.44	11968	0.0	0	0.00	
18.64	42436	0.0	0	0.00	
18.97	18162	0.0	0	0.00	
19.14	32053	0.0	0	0.00	
19.65	22777	0.0	0	0.00	
20.21	3282001	250.0	5000	50.00	1,1-DCA
21.36	44426	0.0	0	0.00	
21.64	46993	0.0	0	0.00	
22.09	15309	0.0	0	0.00	
22.22	5017	0.0	0	0.00	
22.37	14833	0.0	0	0.00	
22.59	18990	0.0	0	0.00	
22.74	11145	0.0	0	0.00	
22.92	28867	0.0	0	0.00	
23.13	37038	0.0	0	0.00	
23.60	22557	0.0	0	0.00	
24.32	2270351	250.0	5000	50.00	2,2-DCPA
24.71	3753220	250.0	5000	50.00	CIS 1,2-DCE
25.73	4056402	250.0	5000	50.00	CHLOROFORM
26.77	2383648	250.0	5000	50.00	BCM

Continued...

File : c:\ezchrom\voatemp\160527.08
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 50.0 ppb 8
 Acquired : May 27, 1996 23:59:56
 Printed : May 29, 1996 16:05:09

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
28.01	3534833	250.0	5000	50.00	1,1,1-TCA
28.92	2465296	250.0	5000	50.00	1,1-DCPE
29.34	3403027	250.0	5000	50.00	CARBON TET
30.62	3401391	250.0	5000	50.00	1,2-DCA
31.72	78001	0.0	0	0.00	
32.36	566513	250.0	5000	50.00	2-CL ETH VI ETH
33.67	4039388	250.0	5000	50.00	TCE
34.70	2815532	250.0	5000	50.00	1,2-DCPA
35.05	127694	0.0	0	0.00	
35.35	19651	0.0	0	0.00	
35.49	8926	0.0	0	0.00	
35.84	2521041	250.0	5000	50.00	BRDICLMETHANE
36.06	2042984	250.0	5000	50.00	DIBROMOMETHANE
36.50	180877	0.0	0	0.00	
37.62	50287	0.0	0	0.00	
38.11	6184	0.0	0	0.00	
38.51	2423311	250.0	5000	50.00	CIS 1,3-DCPE
39.61	23755	0.0	0	0.00	
39.97	14010	0.0	0	0.00	
40.32	6583	0.0	0	0.00	
40.83	2194976	250.0	5000	50.00	TRANS 1,3-DCPE
41.46	2941818	250.0	5000	50.00	1,1,2-TCA
42.27	7642	0.0	0	0.00	
42.56	5685776	500.0	10000	100.00	1,3 DCPA/PCE
43.61	1674419	250.0	5000	50.00	DIBRCLMETHANE
44.43	1351157	250.0	5000	50.00	1,2-DBEA (EDB)
45.66	2290973	2500.0	50000	500.00	1CL4FBZ (SURR)
46.21	1496494	250.0	5000	50.00	CHLOROBENZENE
46.43	3846356	250.0	5000	50.00	1,1,1,2-PCA
47.23	954382	5.0	100	1.00	1CL2FBZ (IS)
47.51	40925	0.0	0	0.00	
47.90	7006	0.0	0	0.00	
48.02	27470	0.0	0	0.00	
48.69	3247	0.0	0	0.00	
49.02	14801	0.0	0	0.00	
49.80	9937	0.0	0	0.00	
50.27	1040362	250.0	5000	50.00	BROMOFORM
51.06	2401409	250.0	5000	50.00	1,1,2,2-PCA
51.68	1584743	250.0	5000	50.00	1,2,3-TCPA
52.04	918328	250.0	5000	50.00	BROMOBENZENE
52.61	1252934	250.0	5000	50.00	2-CL TOLUENE
52.81	1542287	250.0	5000	50.00	4-CL TOLUENE
53.59	17265	0.0	0	0.00	
53.86	13560	0.0	0	0.00	
54.10	2372	0.0	0	0.00	
54.30	32842	0.0	0	0.00	
54.85	7591	0.0	0	0.00	
55.16	5002	0.0	0	0.00	
55.34	1258	0.0	0	0.00	
55.57	774	0.0	0	0.00	
55.90	2191543	250.0	5000	50.00	1,3-DCB
56.38	2198857	250.0	5000	50.00	1,4-DCB
57.30	4246	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.08
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 50.0 ppb 8
 Acquired : May 27, 1996 23:59:56
 Printed : May 29, 1996 16:05:09

Channel B Results

RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
57.39	14908	0.0	0	0.00	
57.94	2181945	250.0	5000	50.00	1,2-DCB
58.97	8076	0.0	0	0.00	
59.13	6962	0.0	0	0.00	
59.32	7276	0.0	0	0.00	
59.64	4135	0.0	0	0.00	
59.85	2922	0.0	0	0.00	
60.35	6120	0.0	0	0.00	
60.83	3511	0.0	0	0.00	
61.26	362930	250.0	5000	50.00	1,2-DBr-3-CPA
61.84	11255	0.0	0	0.00	
62.21	3113	0.0	0	0.00	
62.34	1655	0.0	0	0.00	
62.49	2665	0.0	0	0.00	
62.63	3263	0.0	0	0.00	
62.97	1771	0.0	0	0.00	
63.20	1430	0.0	0	0.00	
63.63	2751	0.0	0	0.00	
63.93	18135	0.0	0	0.00	
64.21	1734972	250.0	5000	50.00	1,2,4-TCB
64.64	2350272	250.0	5000	50.00	HEXACL BUTADIENE
65.80	1601524	250.0	5000	50.00	1,2,3-TCB
66.69	666	0.0	0	0.00	
66.86	3481	0.0	0	0.00	

Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:46
 Channel : A
 Peak : Vinyl Chloride

* - Replicate Not Used

Rel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0026	0.4	0.006491	0.0026						0
2	0.0031	0.5	0.006283	0.0031						0
3	0.0075	1	0.007517	0.0075						0
4	0.0133	5	0.003655	0.0133						0
5	0.0346	10	0.003461	0.0346						0
6	0.0871	25	0.003484	0.0871						0
7	0.1847	50	0.003694	0.1847						0

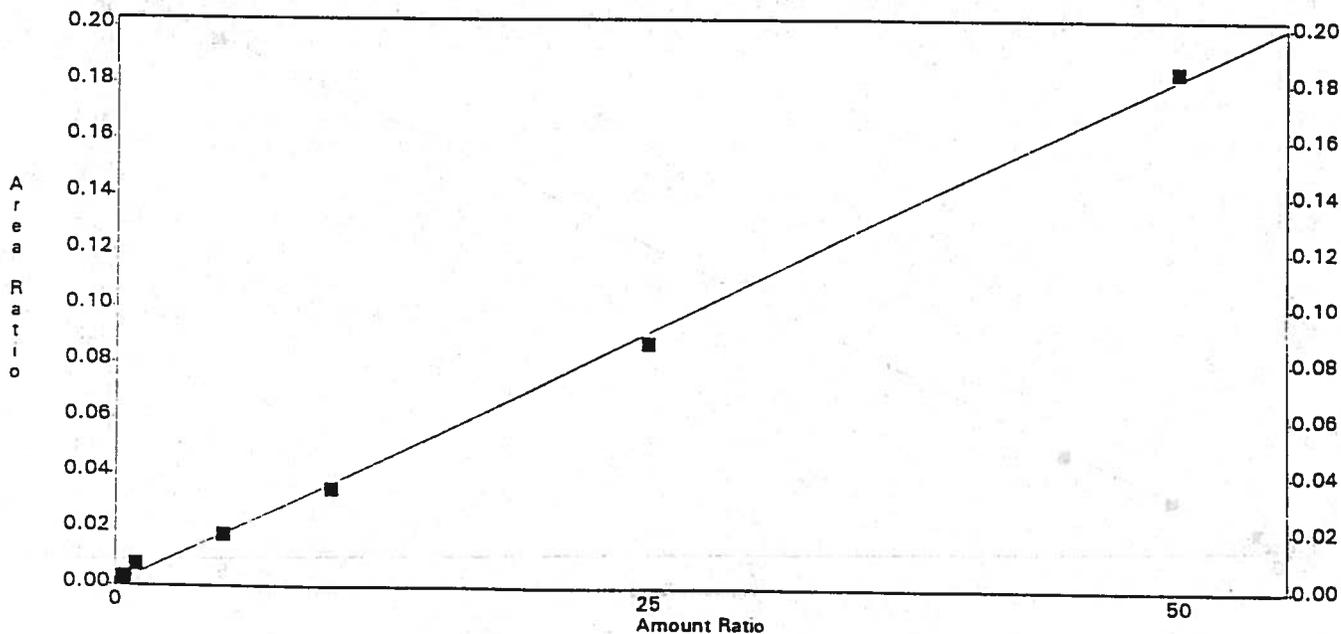
Lab Flag: Replace

Average RF: 0.00494077
 StdDev: 0.00174932
 %RSD: 35.4057

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 275.02 x Area - 0.149081
 R² = 0.998443 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:46
 Channel : A
 Peak : 1,1-dce

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0031	0.4	0.007845	0.0031							0
2	0.0041	0.5	0.008104	0.0041							0
3	0.0149	1	0.01495	0.0149							0
4	0.0465	5	0.009294	0.0465							0
5	0.0908	10	0.009077	0.0908							0
6	0.2479	25	0.009916	0.2479							0
7	0.4745	50	0.00945	0.4745							0

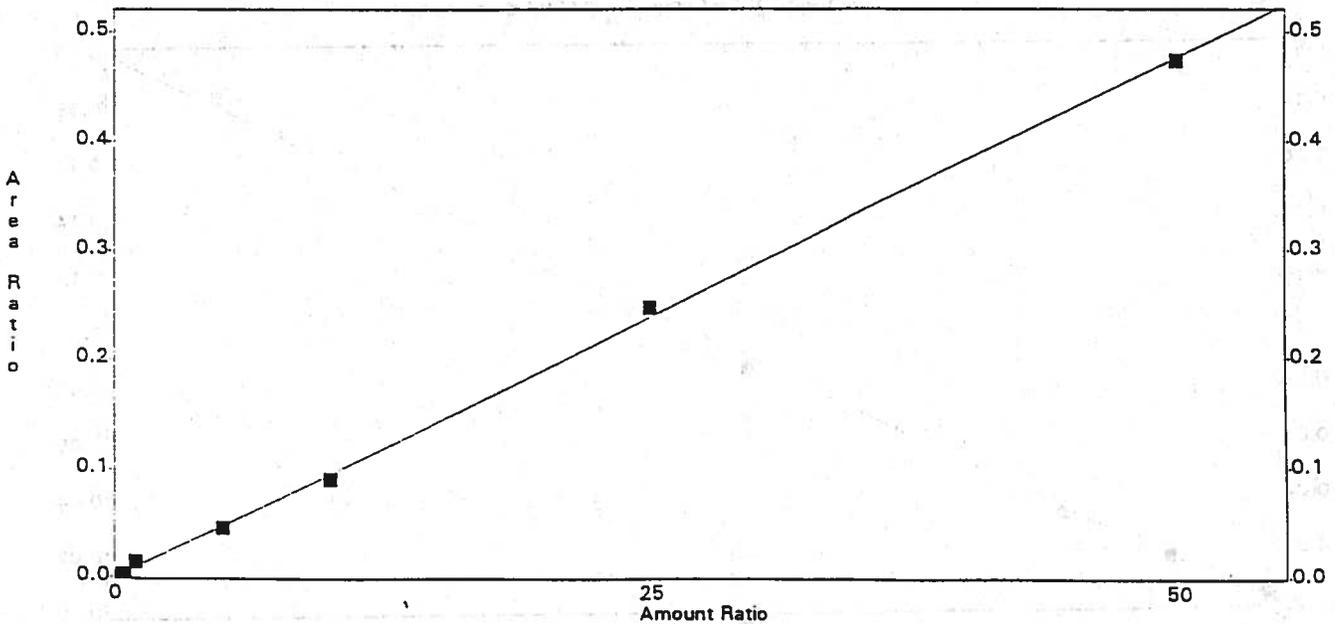
Calib Flag: Replace

Average RF: 0.00981067
 RF StdDev: 0.0023834
 RF %RSD: 24.2939

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 104.759 x Area - 0.0679929
 R^2 = 0.999227 ✓

Internal Standard Curve - Scaling: None



Method : C:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:46
 Channel : A
 Peak : Mtbe

* - Replicate Not Used

Cl Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic MSB	Old Area Ratio
1	0.0026	0.4	0.006601	0.0026						0
2	0.0029	0.5	0.005707	0.0029						0
3	0.0082	1	0.008219	0.0082						0
4	0.0370	5	0.007393	0.0370						0
5	0.0752	10	0.007515	0.0752						0
6	0.2154	25	0.008614	0.2154						0
7	0.4145	50	0.008299	0.4145						0

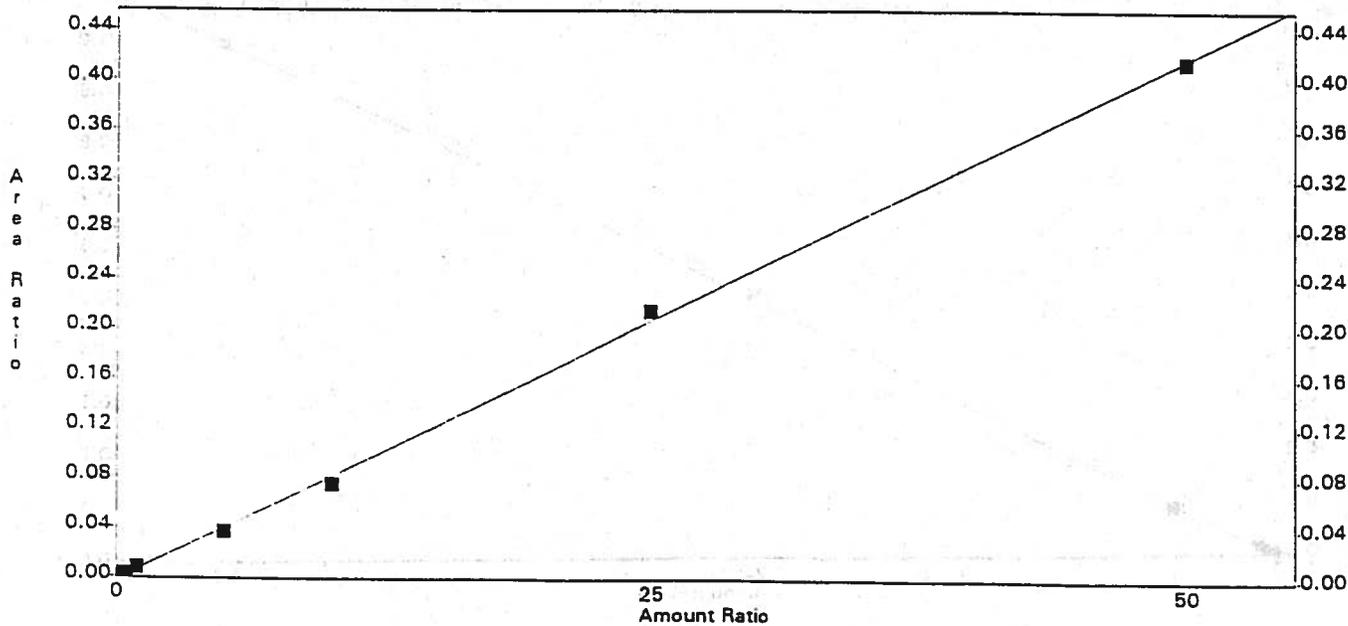
ab Flag: Replace

Average RF: 0.00747843
 StdDev: 0.0010349
 MSB: 13.8384

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 119.125 x Area + 0.260827
 R² = 0.999138 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:47
 Channel : A
 Peak : Trans 1,2-dce

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic 4RSD	Old Area Ratio
1	0.0070	0.4	0.01746	0.0070							0
2	0.0079	0.5	0.01585	0.0079							0
3	0.0191	1	0.01912	0.0191							0
4	0.0895	5	0.0179	0.0895							0
5	0.1793	10	0.01793	0.1793							0
6	0.5051	25	0.0202	0.5051							0
7	0.9957	50	0.01991	0.9957							0

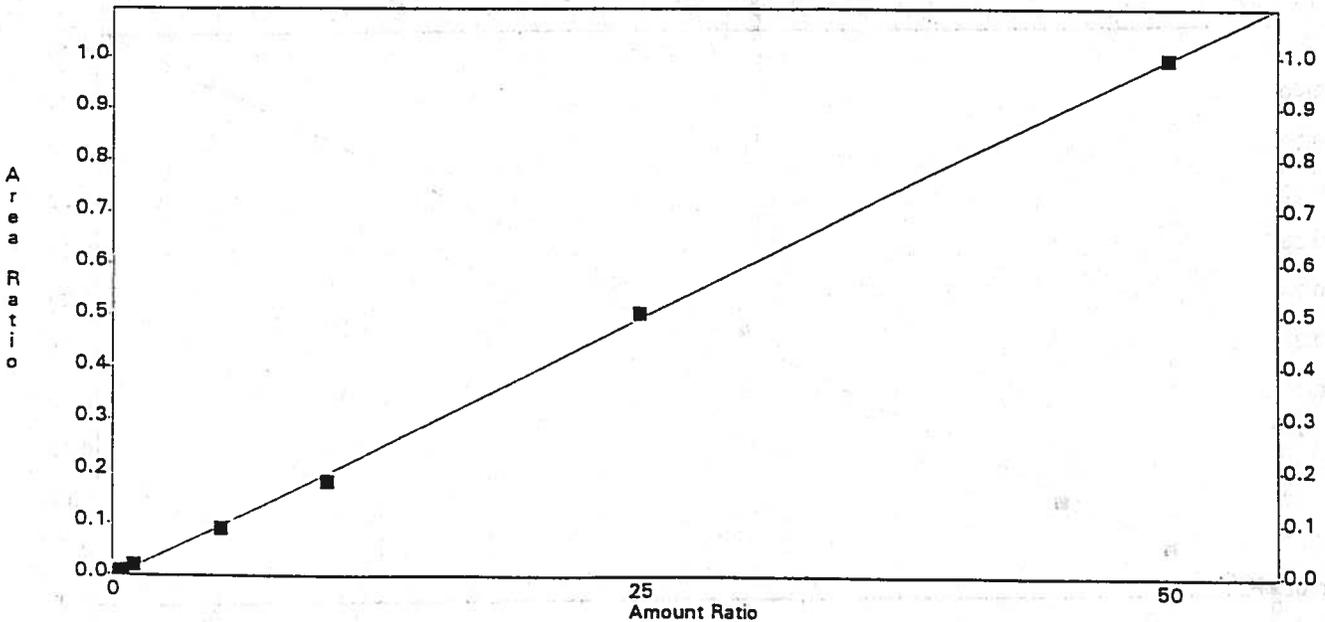
Calib Flag: Replace

Average RF: 0.0183385
 RF StdDev: 0.00152161
 RF 4RSD: 8.29733

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 49.8507 x Area + 0.284548
 $R^2 = 0.999491$

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:33:47

Channel : A

Peak : Cis 1,2-dce

Peak	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0057	0.4	0.01422	0.0057							0
2	0.0066	0.5	0.01329	0.0066							0
3	0.0149	1	0.01492	0.0149							0
4	0.0819	5	0.01638	0.0819							0
5	0.1715	10	0.01715	0.1715							0
6	0.4753	25	0.01905	0.4753							0
7	0.9660	50	0.01932	0.9660							0

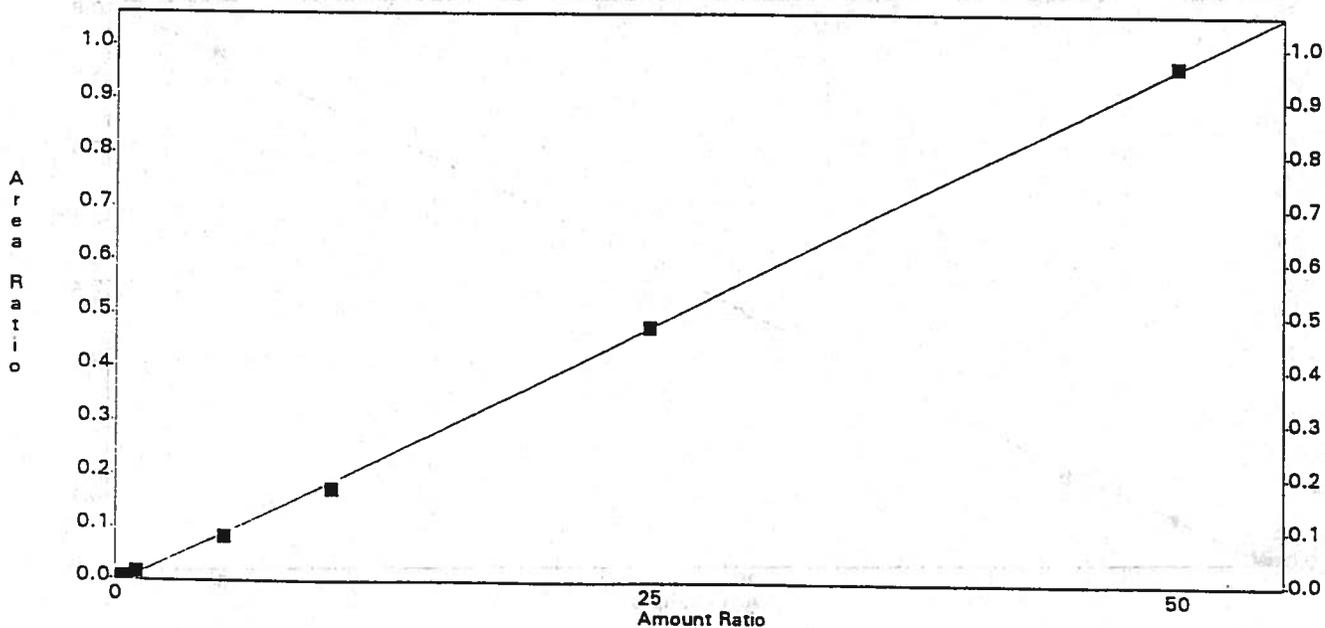
Lab Flag: Replace

Average RF: 0.0163337
RF StdDev: 0.00233581
%RSD: 14.3006

Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 51.4442 x Area + 0.465857
R² = 0.999555 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:47
 Channel : A
 Peak : 1,1-dcpe

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0046	0.4	0.01146	0.0046							0
2	0.0052	0.5	0.01038	0.0052							0
3	0.0118	1	0.01177	0.0118							0
4	0.0630	5	0.0126	0.0630							0
5	0.1297	10	0.01297	0.1297							0
6	0.3644	25	0.01458	0.3644							0
7	0.7426	50	0.01485	0.7426							0

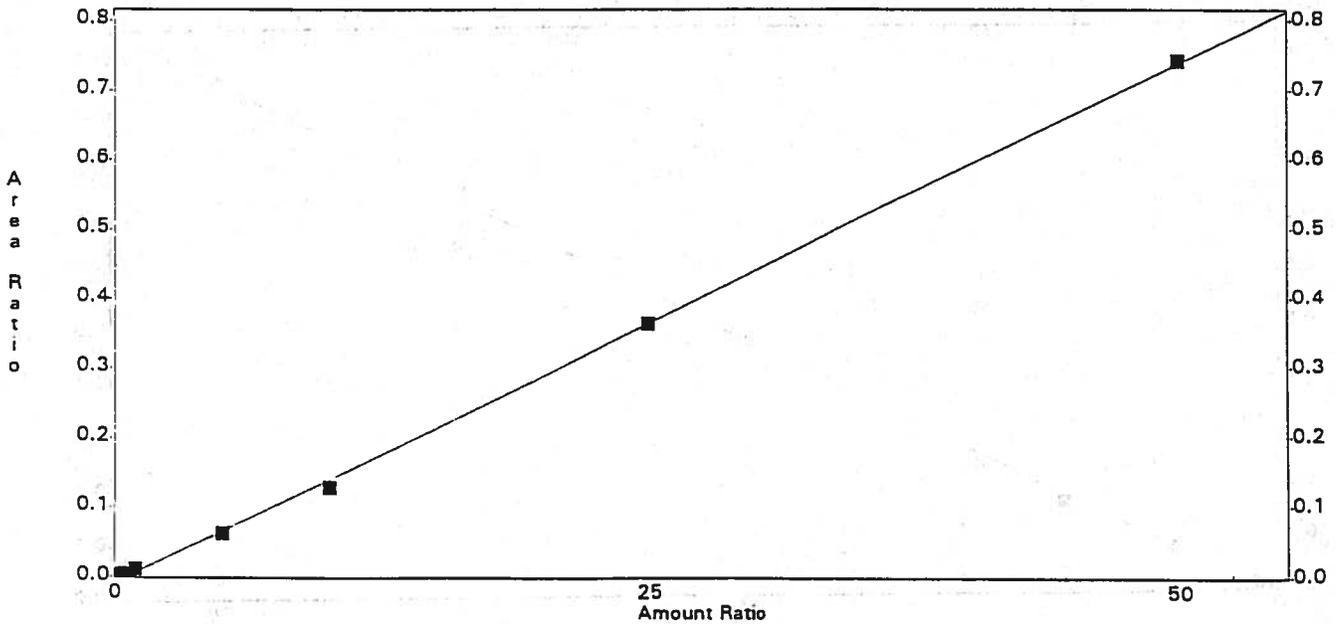
Calib Flag: Replace

Average RF: 0.0126594
 RF StdDev: 0.00163292
 RF %RSD: 12.8988

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 66.9601 x Area + 0.489456
 R² = 0.999428

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:48
 Channel : A
 Peak : Benzene

* - Replicate Not Used

Vel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic tRSD	Old Area Ratio
1	0.0132	0.4	0.03295	0.0132						0
2	0.0154	0.5	0.03075	0.0154						0
3	0.0350	1	0.03495	0.0350						0
4	0.1749	5	0.03498	0.1749						0
5	0.3632	10	0.03632	0.3632						0
6	1.0200	25	0.0408	1.0200						0
7	2.0637	50	0.04127	2.0637						0

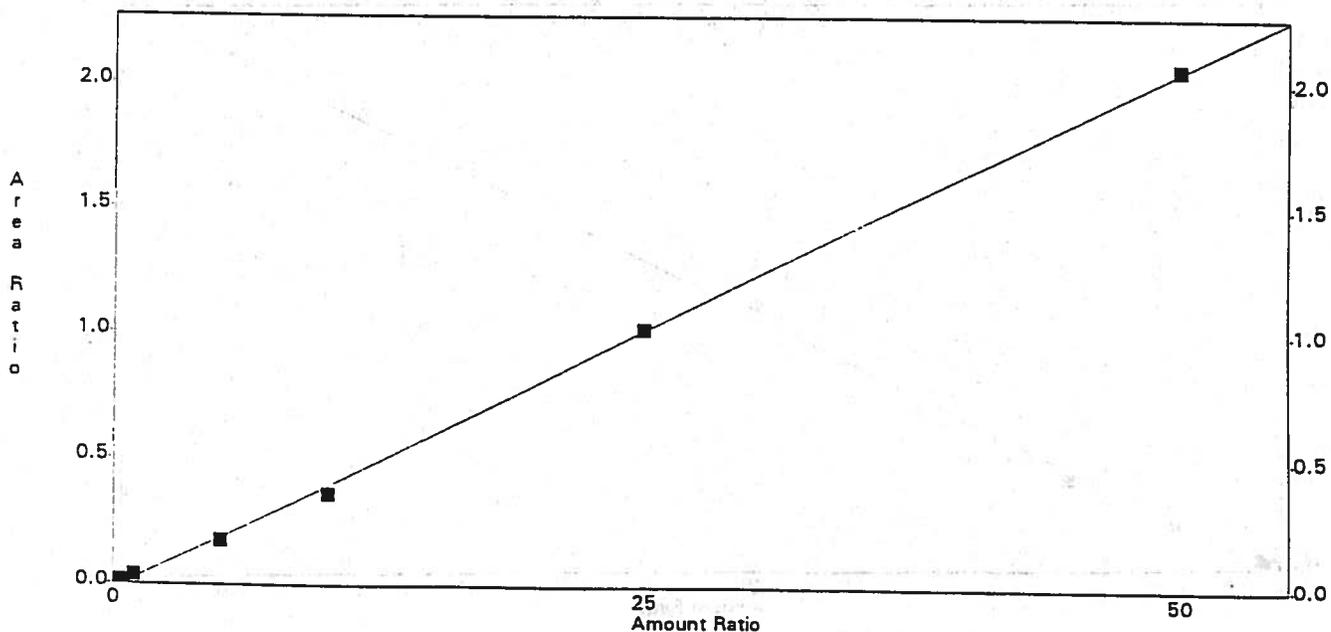
Lib Flag: Replace

Average RF: 0.0360051
 StdDev: 0.00387175
 ARSD: 10.7533

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 24.0848/x Area + 0.448284
 R² = 0.99946 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:48
 Channel : A
 Peak : Tce

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0101	0.4	0.02515	0.0101							0
2	0.0103	0.5	0.02059	0.0103							0
3	0.0205	1	0.02053	0.0205							0
4	0.0949	5	0.01898	0.0949							0
5	0.1966	10	0.01966	0.1966							0
6	0.5534	25	0.02214	0.5534							0
7	1.1095	50	0.02219	1.1095							0

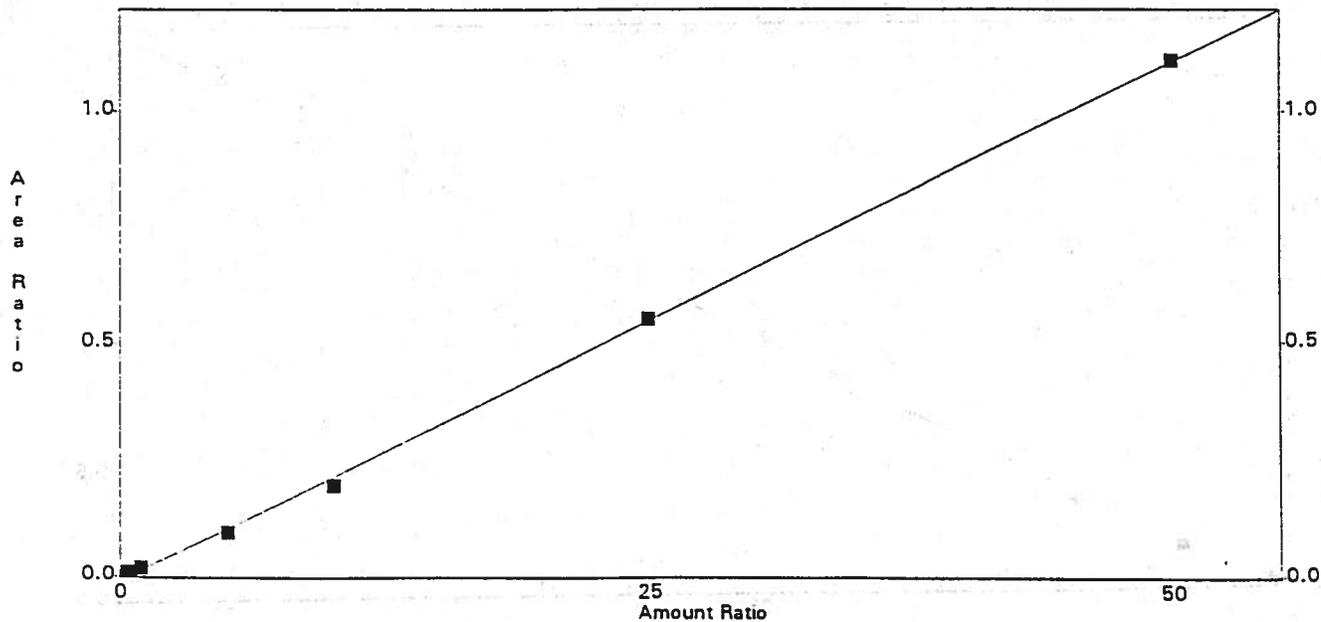
Calib Flag: Replace

Average RF: 0.0213213
 RF StdDev: 0.00206163
 RF ARSD: 9.66935

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 44.8325 x Area + 0.34927
 R² = 0.999403 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:49
 Channel : A
 Peak : Cis 1,3-dcpe

* - Replicate Not Used

Rel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0024	0.4	0.005995	0.0024						0
2	0.0029	0.5	0.005721	0.0029						0
3	0.0068	1	0.006836	0.0068						0
4	0.0320	5	0.006409	0.0320						0
5	0.0719	10	0.00719	0.0719						0
6	0.2101	25	0.008403	0.2101						0
7	0.4224	50	0.008448	0.4224						0

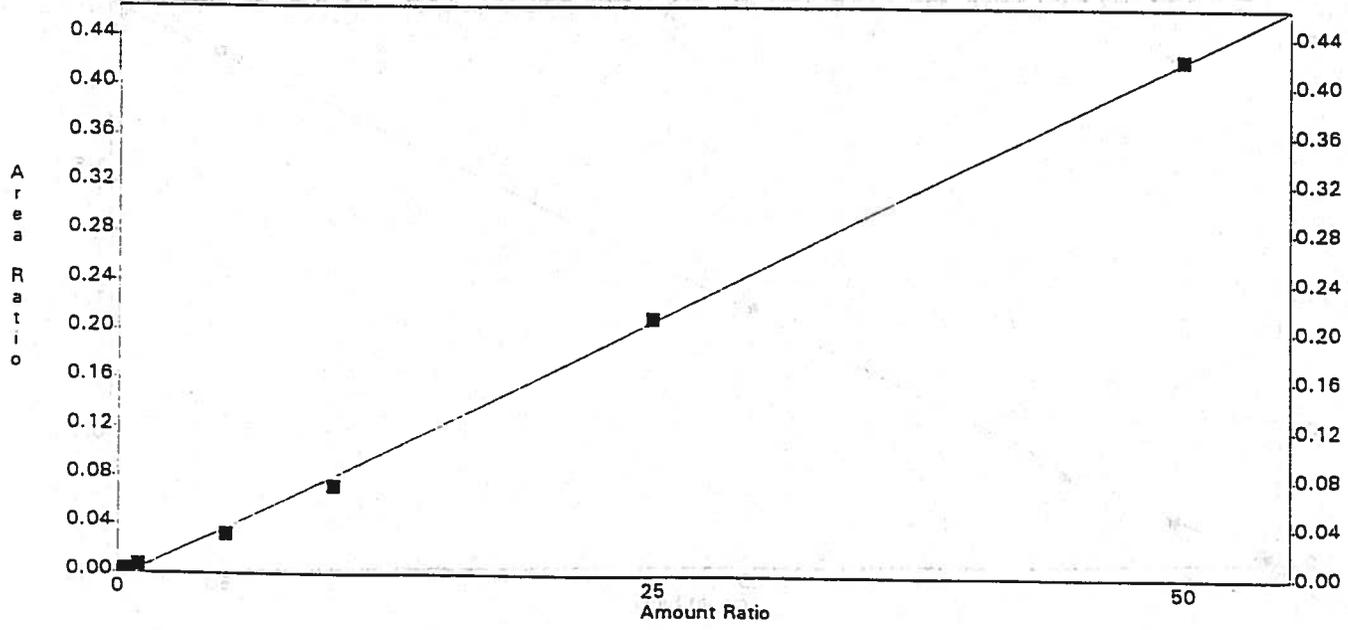
Flag: Replace

Average RF: 0.00700015
 RF StdDev: 0.00108974
 ARSD: 15.5674

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 117.179 x Area + 0.558398
 R^2 = 0.999019

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met * - Replicate Not Used
 Printed : May 29, 1996 16:33:49
 Channel : A
 Peak : Toluene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0135	0.4	0.03384	0.0135							0
2	0.0154	0.5	0.03075	0.0154							0
3	0.0353	1	0.03529	0.0353							0
4	0.1661	5	0.03323	0.1661							0
5	0.3416	10	0.03416	0.3416							0
6	0.9633	25	0.03853	0.9633							0
7	1.9393	50	0.03879	1.9393							0

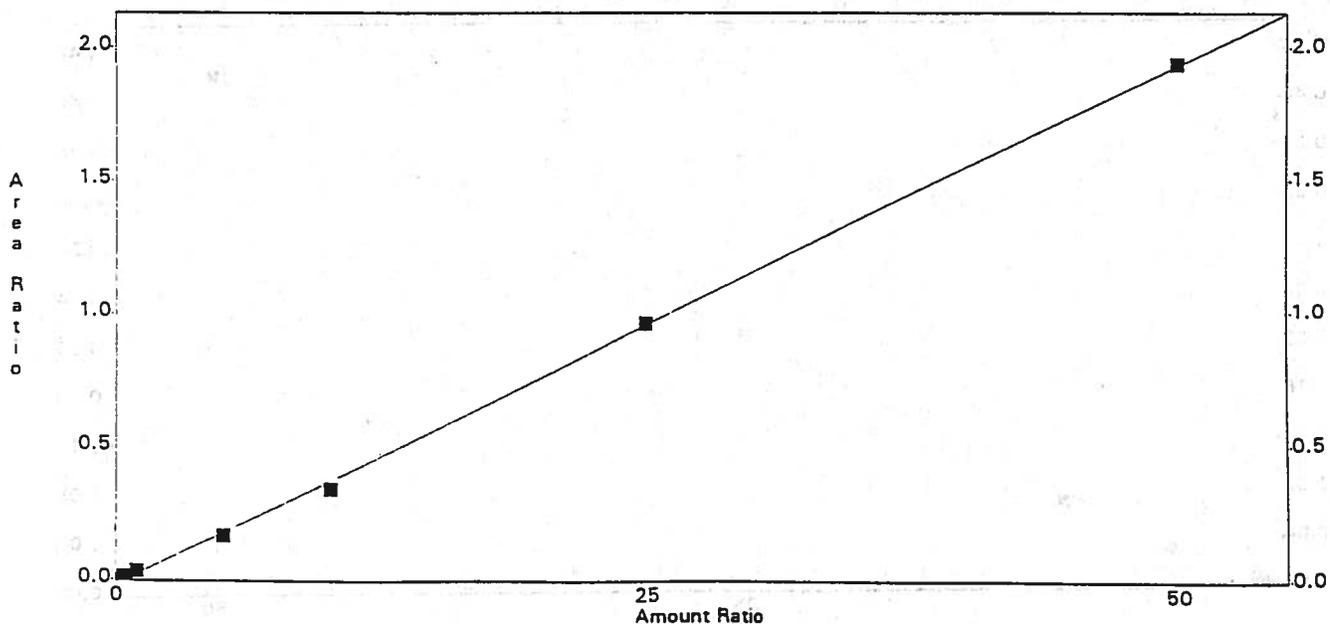
Calb Flag: Replace

Average RF: 0.0349403
 RF StdDev: 0.00289085
 RF %RSD: 8.27367

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 25.6339 x Area + 0.404959
 R² = 0.999437

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:49
 Channel : A
 Peak : Trans 1,3-dcpe

* - Replicate Not Used

Vol	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic	MSD	Replic	MSD	Old Area Ratio
1	0.0031	0.4	0.007828	0.0031									0
2	0.0036	0.5	0.007197	0.0036									0
3	0.0087	1	0.008661	0.0087									0
4	0.0426	5	0.008515	0.0426									0
5	0.0974	10	0.009742	0.0974									0
6	0.2837	25	0.01135	0.2837									0
7	0.5616	50	0.01123	0.5616									0

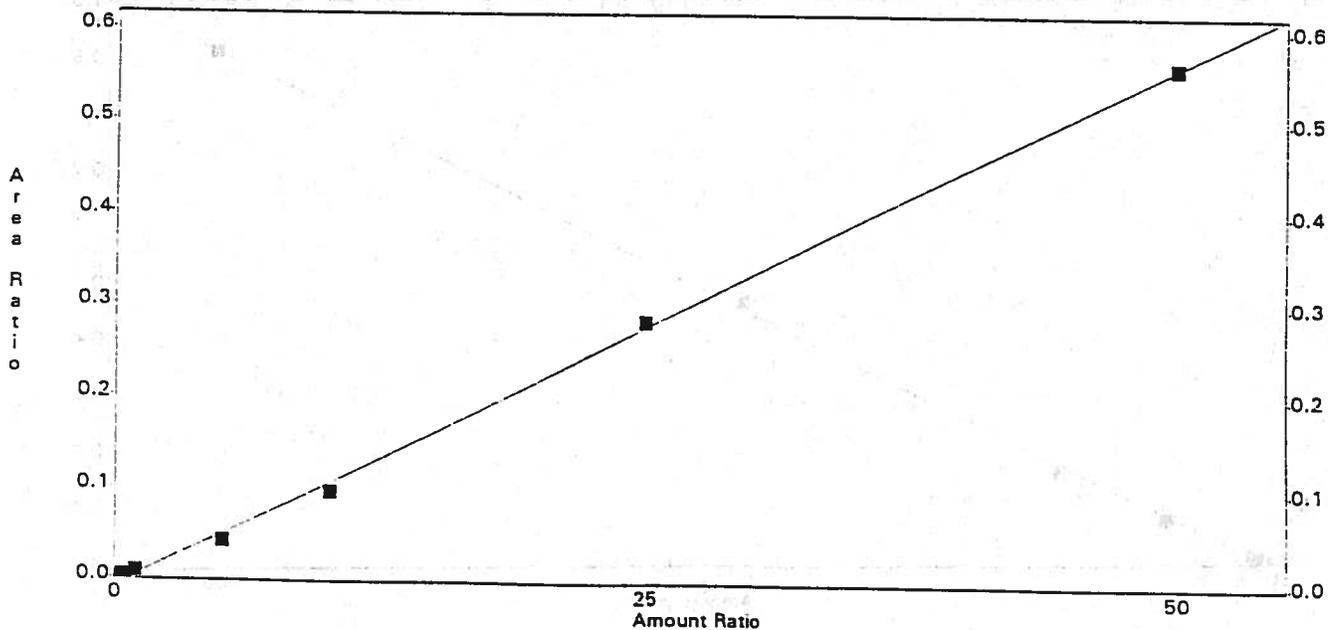
Flag: Replace

Average RF: 0.00921761
 RF StdDev: 0.00161656
 MSD: 17.5377

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 87.9314 x Area + 0.558652
 $R^2 = 0.999052$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:49
 Channel : A
 Peak : Pce

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0066	0.4	0.01652	0.0066							0
2	0.0105	0.5	0.02097	0.0105							0
3	0.0166	1	0.01659	0.0166							0
4	0.0795	5	0.0159	0.0795							0
5	0.1651	10	0.01651	0.1651							0
6	0.4691	25	0.01876	0.4691							0
7	0.9172	50	0.01834	0.9172							0

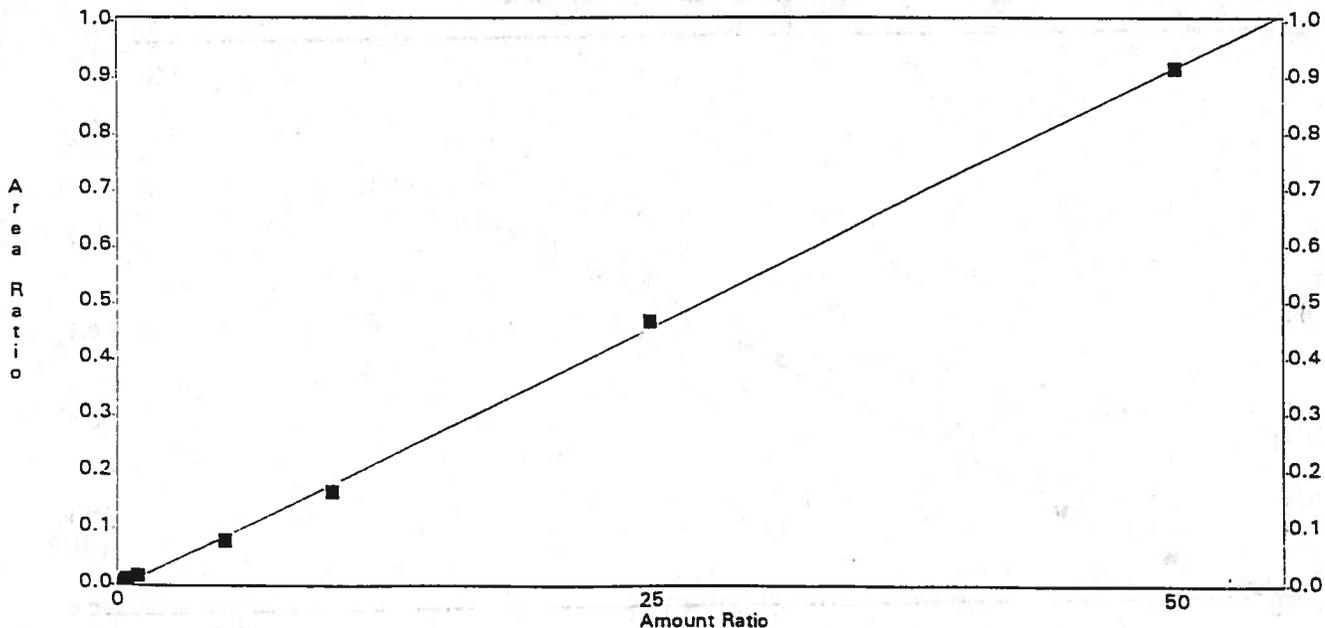
Calib Flag: Replace

Average RF: 0.0176564
 RF StdDev: 0.00180485
 RF %RSD: 10.222

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 54.0523 x Area + 0.275462
 $R^2 = 0.999295$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met

Printed : May 29, 1996 16:33:50

Channel : A

Peak : 1c14fbz (surr)

* - Replicate Not Used

Rel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0145	4	0.003619	0.0145						0
2	0.0161	5	0.003224	0.0161						0
3	0.0354	10	0.003538	0.0354						0
4	0.1692	50	0.003384	0.1692						0
5	0.3485	100	0.003485	0.3485						0
6	0.9810	250	0.003924	0.9810						0
7	1.9839	500	0.003968	1.9839						0

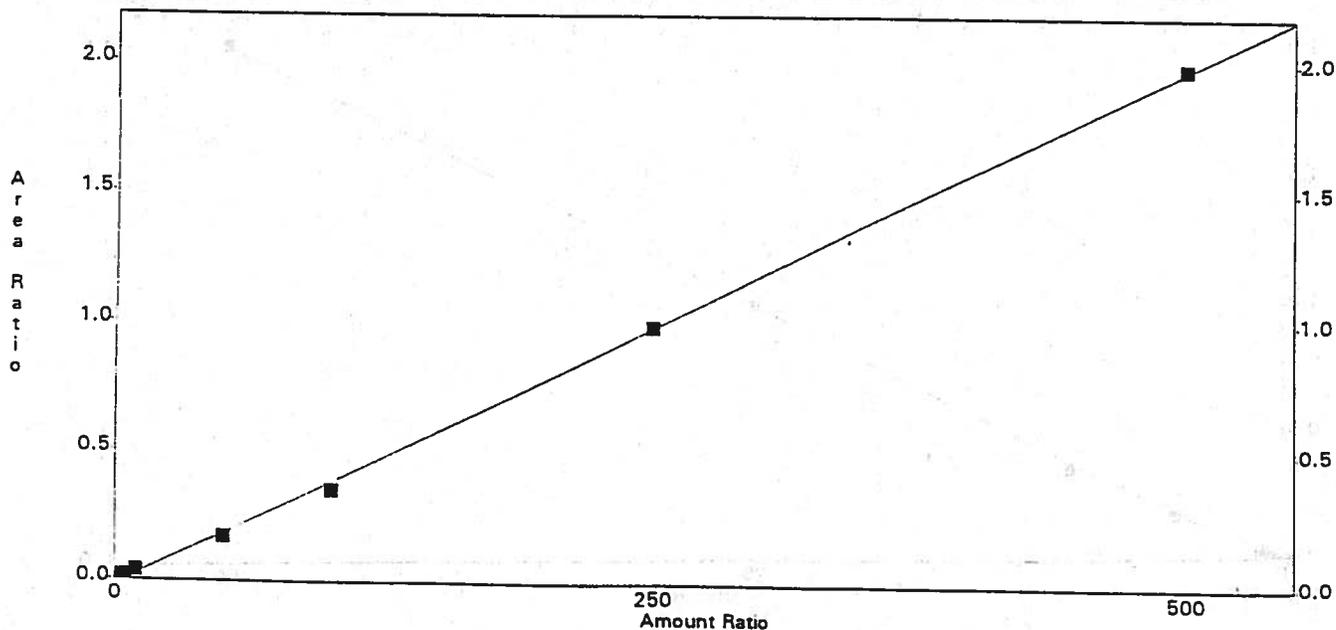
Ab Flag: Replace

Average RF: 0.00359175
RF StdDev: 0.000272407
%RSD: 7.58426

Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 250.725 x / Area + 4.18185
R² = 0.999416 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:33:50

Channel : A

Peak : Chlorobenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0131	0.4	0.03273	0.0131							0
2	0.0153	0.5	0.03059	0.0153							0
3	0.0343	1	0.03431	0.0343							0
4	0.1718	5	0.03436	0.1718							0
5	0.3559	10	0.03559	0.3559							0
6	1.0031	25	0.04012	1.0031							0
7	2.0219	50	0.04044	2.0219							0

Calib Flag: Replace

Average RF: 0.0354485

RF StdDev: 0.00365732

RF %RSD: 10.3173

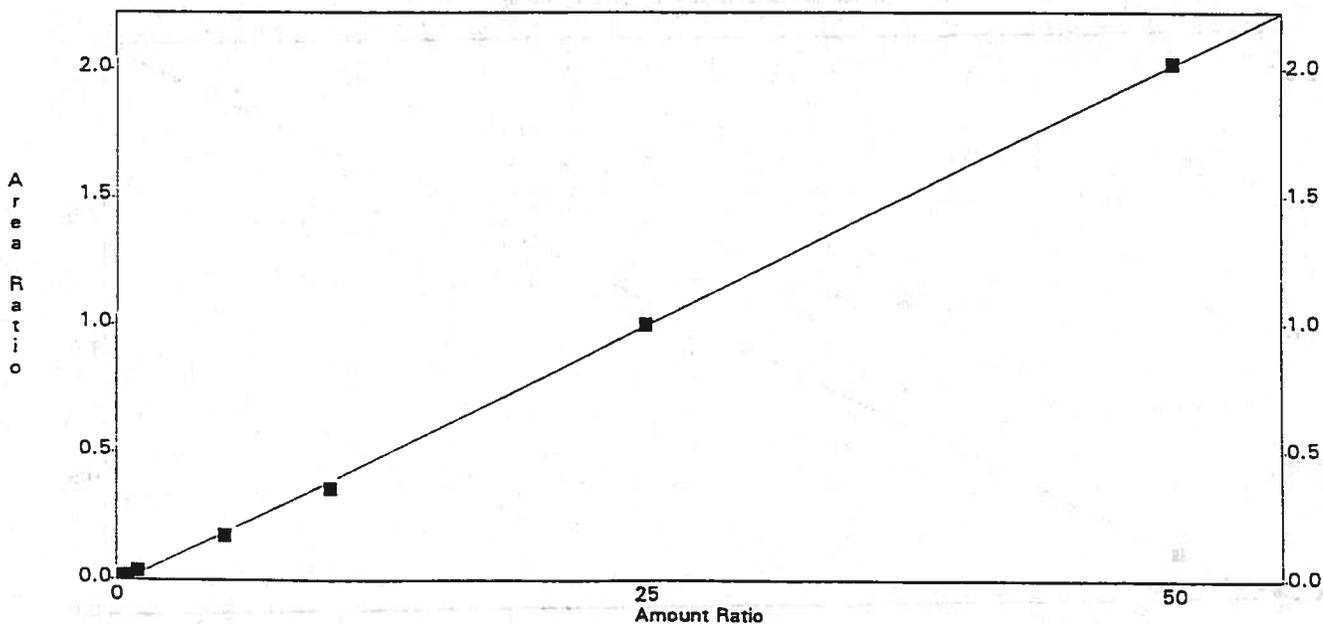
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 24.5733 x Area + 0.436988
R² = 0.999456

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:50
 Channel : A
 Peak : Ethylbenzene

* - Replicate Not Used

el	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0115	0.4	0.02873	0.0115							0
2	0.0134	0.5	0.02681	0.0134							0
3	0.0301	1	0.03013	0.0301							0
4	0.1551	5	0.03102	0.1551							0
5	0.3238	10	0.03238	0.3238							0
6	0.8952	25	0.03581	0.8952							0
7	1.6707	50	0.03341	1.6707							0

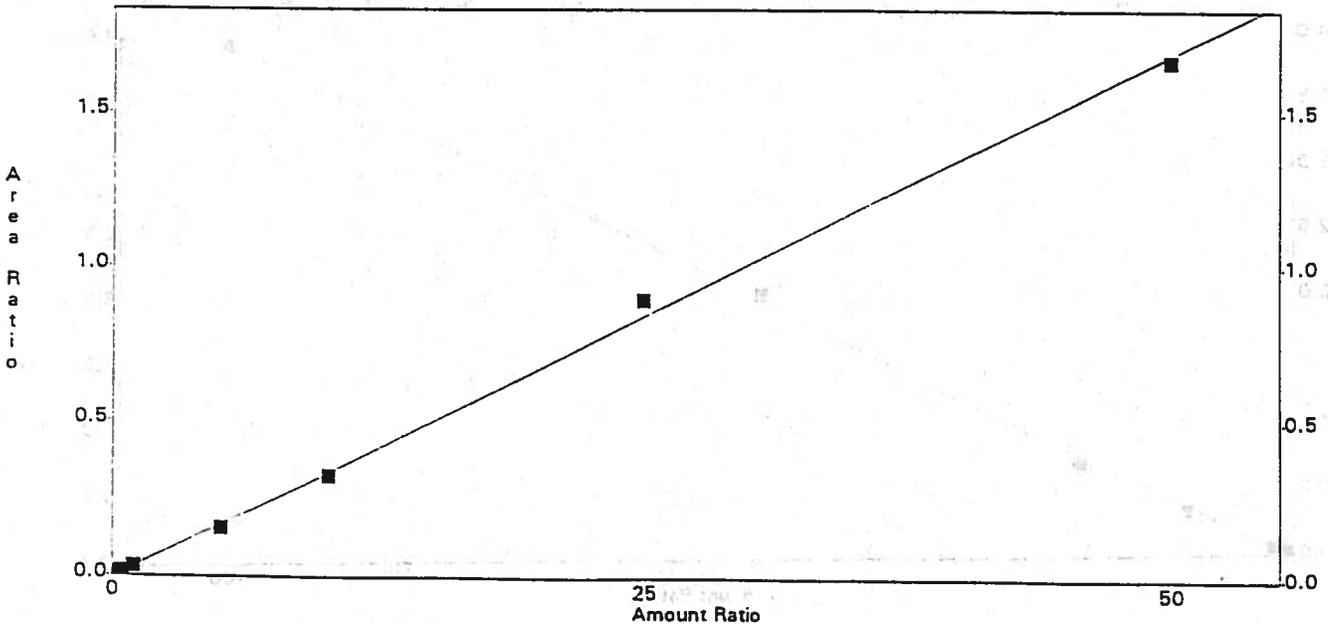
Flag: Replace

Average RF: 0.0311943
 StdDev: 0.00300342
 ARSD: 9.63117

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Fit Eq: Amount = 29.4781 x/Area + 0.0746644
 R² = 0.998596

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed: May 29, 1996 16:33:51
 Channel : A
 Peak : M/P Xylene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0270	0.8	0.03371	0.0270							0
2	0.0315	1	0.03148	0.0315							0
3	0.0703	2	0.03517	0.0703							0
4	0.3520	10	0.0352	0.3520							0
5	0.7254	20	0.03627	0.7254							0
6	2.0254	50	0.04051	2.0254							0
7	3.9515	100	0.03951	3.9515							0

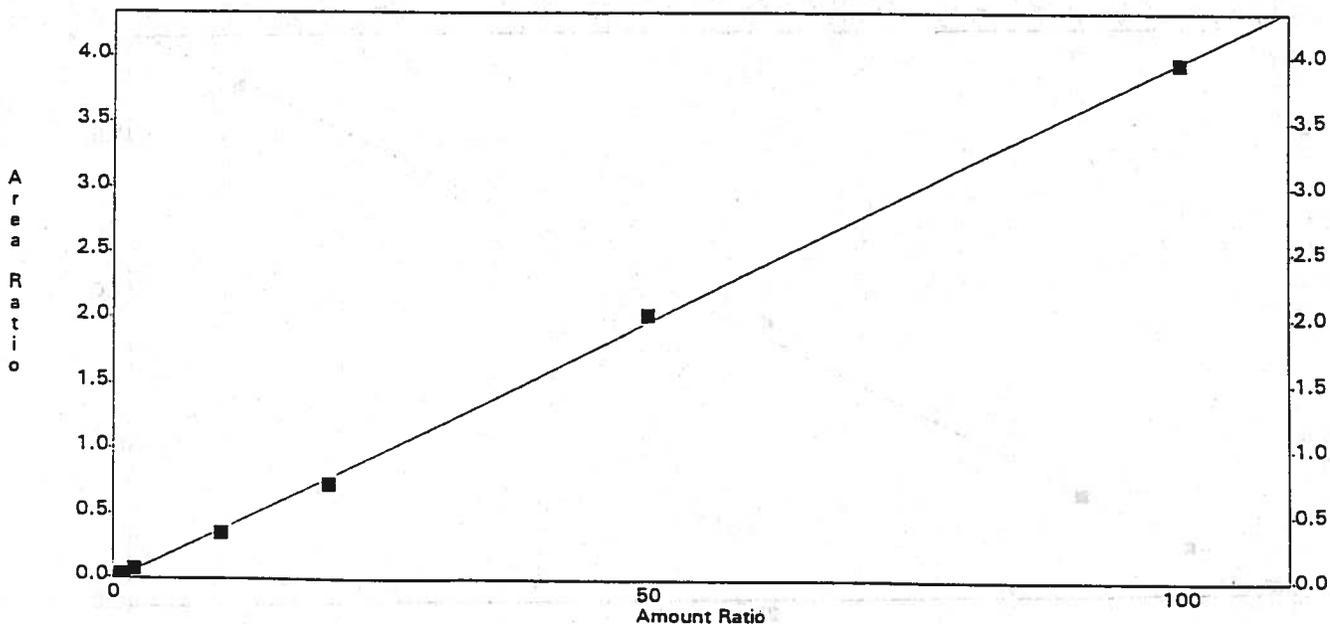
Calib Flag: Replace

Average RF: 0.0359783
 RF StdDev: 0.00315657
 RF %RSD: 8.77353

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 25.075 x Area + 0.526396
 R² = 0.999475 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:51
 Channel : A
 Peak : O Xylene

* - Replicate Not Used

el	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0110	0.4	0.02761	0.0110							0
2	0.0131	0.5	0.02621	0.0131							0
3	0.0289	1	0.02889	0.0289							0
4	0.1424	5	0.02848	0.1424							0
5	0.2946	10	0.02946	0.2946							0
6	0.8350	25	0.0334	0.8350							0
7	1.6795	50	0.03359	1.6795							0

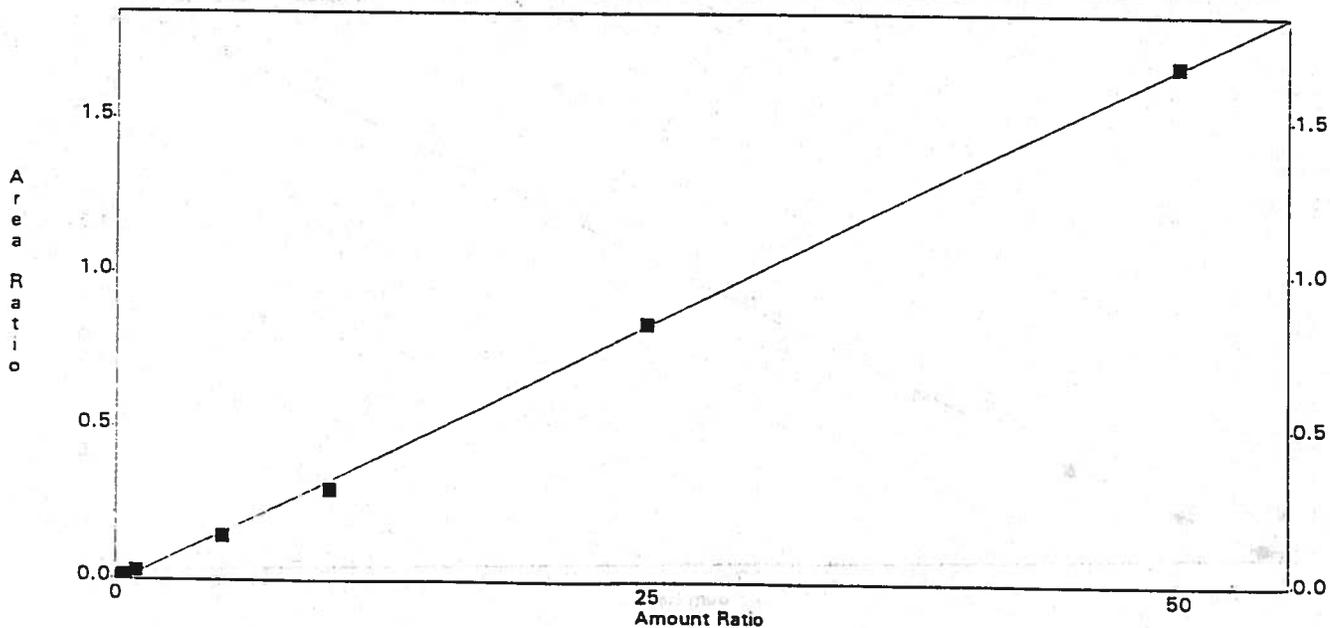
ib Flag: Replace

Average RF: 0.0296627
 RF StdDev: 0.00281703
 %RSD: 9.49689

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 29.5747 x Area + 0.434059
 R² = 0.999415 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:52
 Channel : A
 Peak : Styrene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic AMSD	Old Area Ratio
1	0.0145	0.4	0.03616	0.0145							0
2	0.0171	0.5	0.03422	0.0171							0
3	0.0378	1	0.03775	0.0378							0
4	0.1914	5	0.03829	0.1914							0
5	0.4063	10	0.04063	0.4063							0
6	1.1374	25	0.0455	1.1374							0
7	2.2480	50	0.04496	2.2480							0

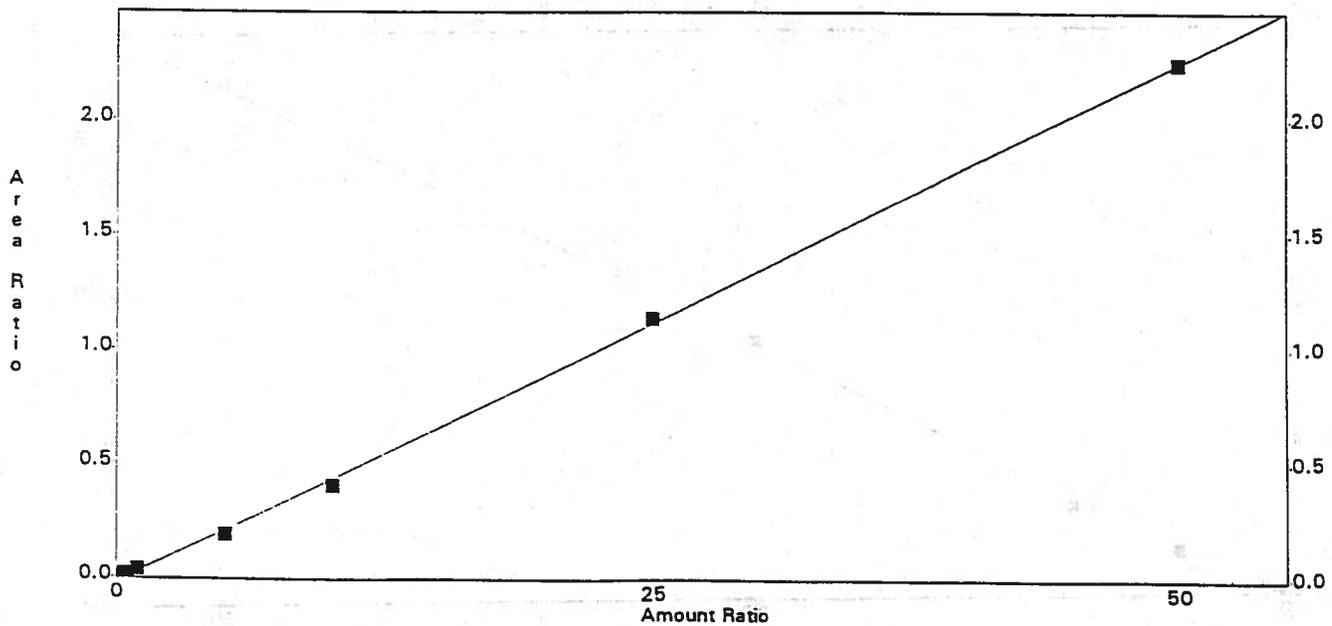
Calib Flag: Replace

Average RF: 0.0396428
 RF StdDev: 0.00429215
 RF AMSD: 10.8271

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 22.0474 x Area + 0.364766
 R² = 0.999506 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:52
 Channel : A
 Peak : Isopropylbenzene

* - Replicate Not Used

Peak	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0095	0.4	0.02387	0.0095							0
2	0.0210	0.5	0.02205	0.0110							0
3	0.0248	1	0.02481	0.0248							0
4	0.1240	5	0.0248	0.1240							0
5	0.2525	10	0.02525	0.2525							0
6	0.7147	25	0.02859	0.7147							0
7	1.4073	50	0.02815	1.4073							0

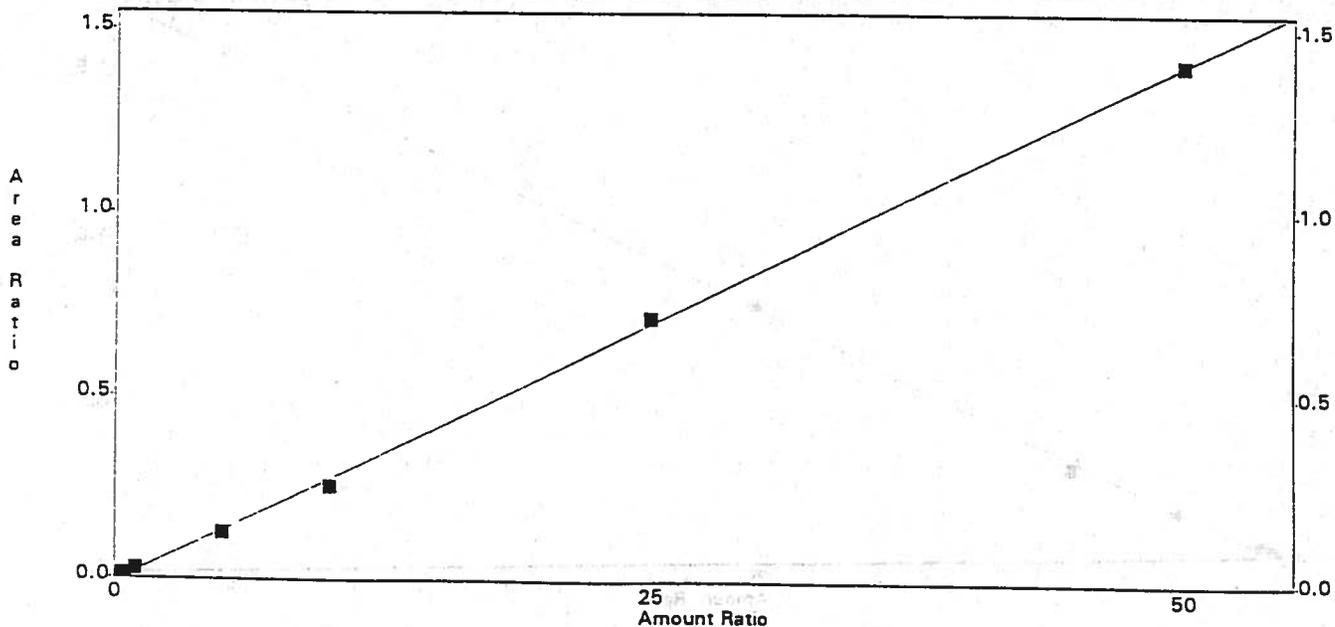
Lab Flag: Replace

Average RF: 0.0253586
 RF StdDev: 0.00231067
 F ARSD: 9.112

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 35.2278 x Area + 0.326063
 $R^2 = 0.999452$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:33:52

Channel : A

Peak : n-propylbenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0102	0.4	0.02545	0.0102							0
2	0.0117	0.5	0.02339	0.0117							0
3	0.0265	1	0.02646	0.0265							0
4	0.1347	5	0.02693	0.1347							0
5	0.2733	10	0.02733	0.2733							0
6	0.7796	25	0.03118	0.7796							0
7	1.5556	50	0.03111	1.5556							0

Calib Flag: Replace

Average RF: 0.0274079

RF StdDev: 0.00296087

RF %RSD: 10.4381

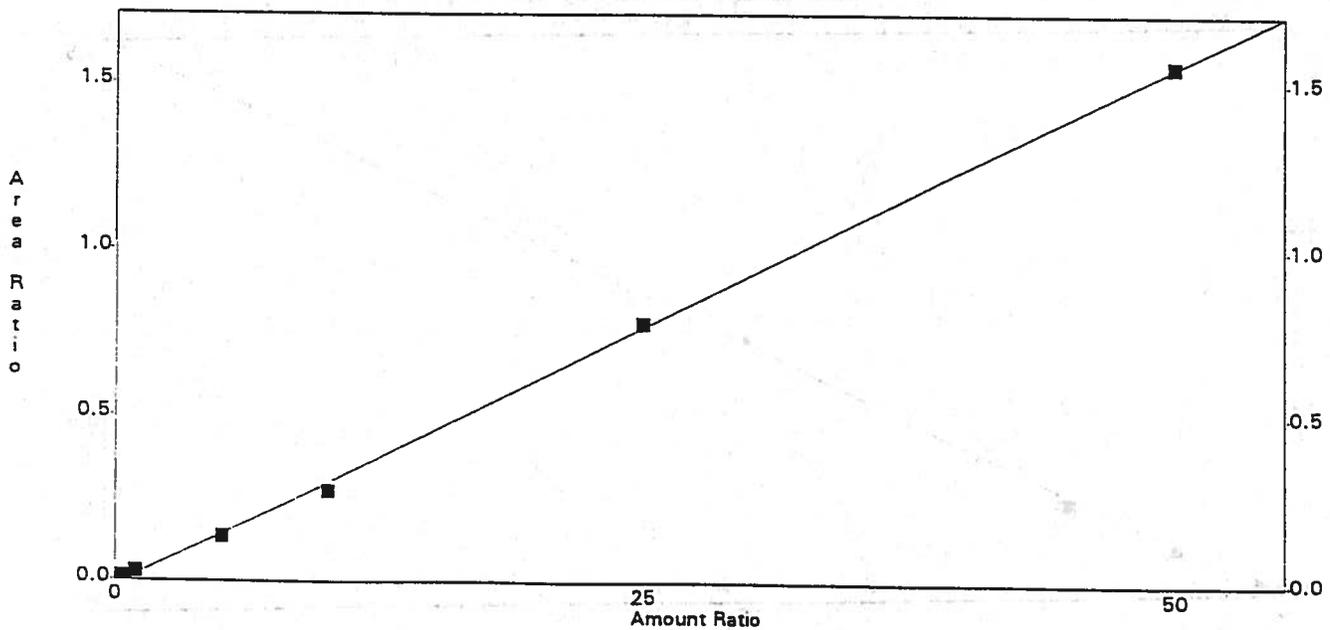
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 31.9015 x Area + 0.406765
R² = 0.999422 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

Printed : May 29, 1996 16:33:52

Channel : A

Peak : Bromobenzene

* - Replicate Not Used

Vel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0143	0.4	0.0358	0.0143						0
2	0.0164	0.5	0.03279	0.0164						0
3	0.0359	1	0.03586	0.0359						0
4	0.1836	5	0.03672	0.1836						0
5	0.3791	10	0.03791	0.3791						0
6	1.0763	25	0.04305	1.0763						0
7	2.1511	50	0.04302	2.1511						0

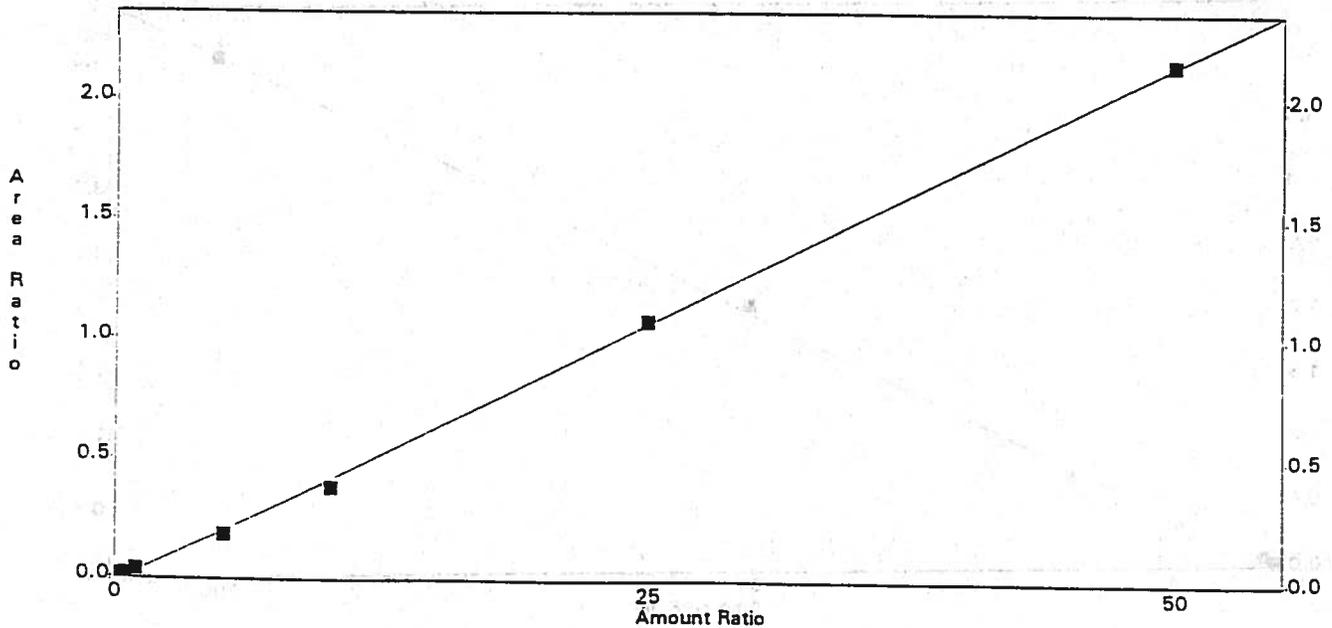
ib Flag: Replace

Average RF: 0.0378775
RF StdDev: 0.00384861
RF ARSD: 10.1607

Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 23.0704 x Area + 0.418243
R^2 = 0.995436 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met * - Replicate Not Used
 Printed : May 29, 1996 16:33:53
 Channel : A
 Peak : 1,3,5-tmb/2-cl tol

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0285	0.8	0.03565	0.0285							0
2	0.0328	1	0.03278	0.0328							0
3	0.0736	2	0.03678	0.0736							0
4	0.3593	10	0.03593	0.3593							0
5	0.7329	20	0.03664	0.7329							0
6	2.0707	50	0.04141	2.0707							0
7	4.0338	100	0.04034	4.0338							0

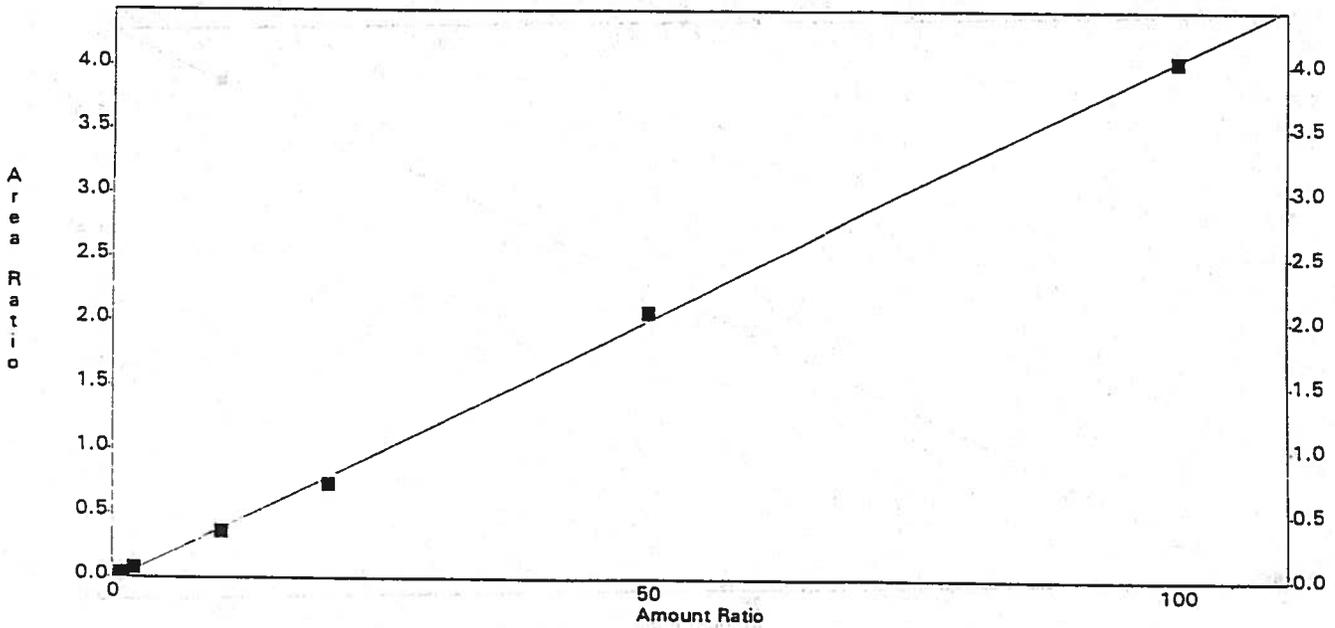
Calib Flag: Replace

Average RF: 0.0370765
 RF StdDev: 0.00293145
 RF %RSD: 7.90649

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 24.5583 x Area + 0.535777
 R² = 0.99938 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:53
 Channel : A
 Peak : 4-cl toluene

* - Replicate Not Used

el	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic WBSD	Old Area Ratio
1	0.0137	0.4	0.03424	0.0137							0
2	0.0158	0.5	0.03156	0.0158							0
3	0.0335	1	0.03353	0.0335							0
4	0.1705	5	0.0341	0.1705							0
5	0.3481	10	0.03481	0.3481							0
6	0.9869	25	0.03948	0.9869							0
7	1.9631	50	0.03926	1.9631							0

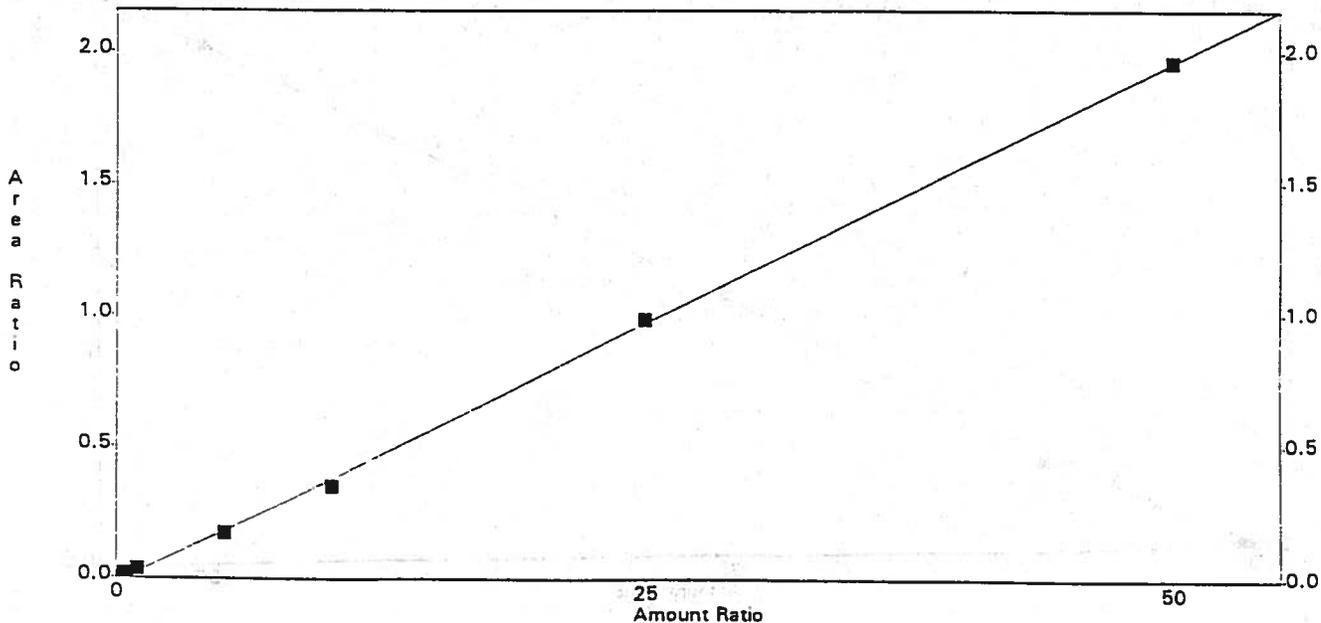
ib Flag: Replace

Average RF: 0.0352814
 RF StdDev: 0.00257433
 WBSD: 8.43032

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 25.2815 x Area + 0.373965
 $R^2 = 0.999456$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

Printed : May 29, 1996 16:33:53

Channel : A

Peak : t-butylbenzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0087	0.4	0.02166	0.0087							0
2	0.0098	0.5	0.01952	0.0098							0
3	0.0218	1	0.02179	0.0218							0
4	0.1049	5	0.02099	0.1049							0
5	0.2119	10	0.02119	0.2119							0
6	0.6160	25	0.02464	0.6160							0
7	1.2264	50	0.02453	1.2264							0

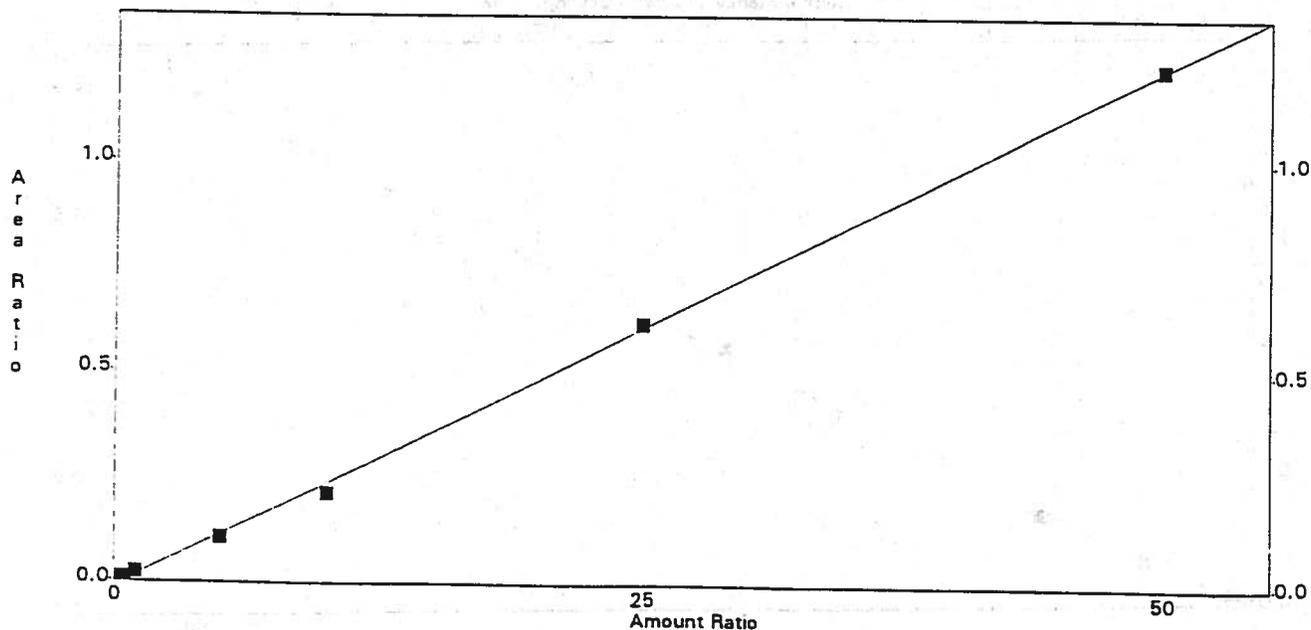
Calib Flag: Replace

Average RF: 0.0220462
RF Stdev: 0.00198533
RF ARSD: 0.55172

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 40.4479 x Area + 0.419611
R² = 0.995231 ✓

Internal Standard Curve - Scaling: None



ethod : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:54
 Channel : A
 eak : 1,2,4-tmb

* - Replicate Not Used

i	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0138	0.4	0.03453	0.0138							0
2	0.0154	0.5	0.0307	0.0154							0
3	0.0353	1	0.03532	0.0353							0
4	0.1640	5	0.0328	0.1640							0
5	0.3302	10	0.03302	0.3302							0
6	0.9300	25	0.0372	0.9300							0
7	1.8451	50	0.0369	1.8451							0

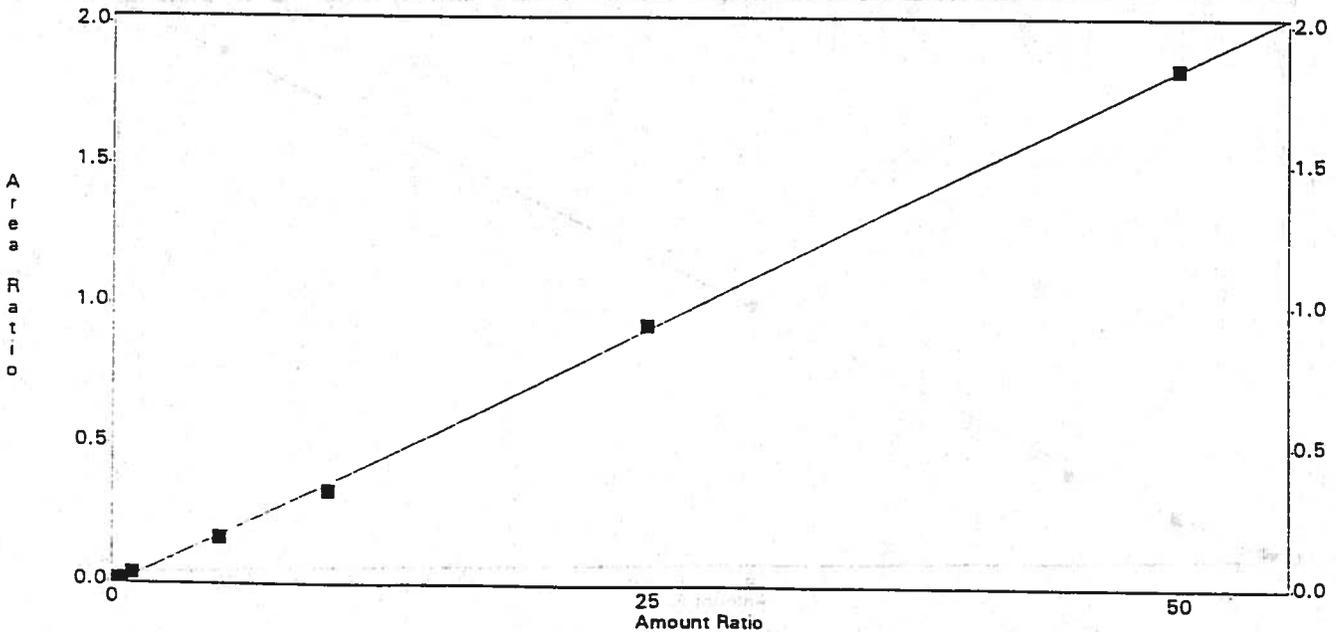
C > Flag: Replace

Average RF: 0.0343522
 RF StdDev: 0.0023494
 RF %RSD: 6.83916

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 26.9254 x Area + 0.305478
 R² = 0.999493 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:54
 Channel : A
 Peak : s-butylbenzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic 4RSD	Old Area Ratio
1	0.0095	0.4	0.02381	0.0095							0
2	0.0106	0.5	0.02125	0.0106							0
3	0.0239	1	0.02386	0.0239							0
4	0.1175	5	0.02349	0.1175							0
5	0.2368	10	0.02368	0.2368							0
6	0.6920	25	0.02768	0.6920							0
7	1.3807	50	0.02761	1.3807							0

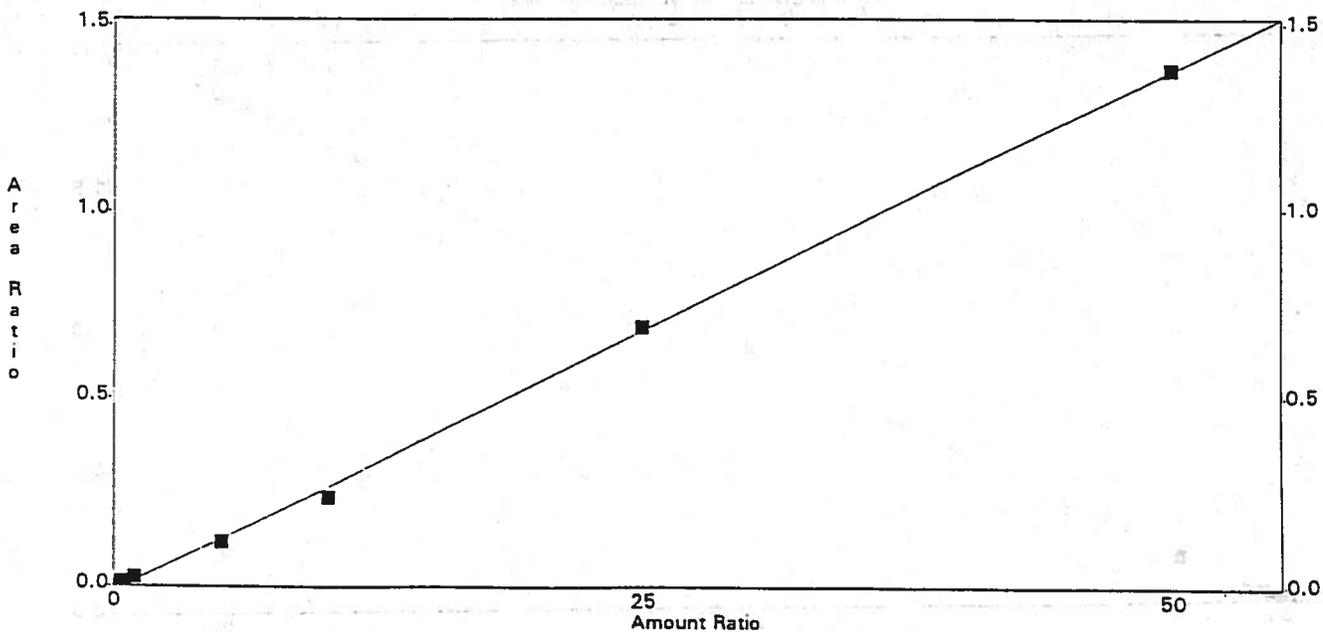
Calib Flag: Replace

Average RF: 0.0244856
 RF StdDev: 0.0023428
 RF 4RSD: 9.56807

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 35.9197 x Area + 0.448724
 R² = 0.999192 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:54
 Channel : A
 Peak : p-isopropyltoluene

* - Replicate Not Used

Vel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic 4RSD	Old Area Ratio
1	0.0099	0.4	0.02467	0.0099						0
2	0.0108	0.5	0.02162	0.0108						0
3	0.0236	1	0.02359	0.0236						0
4	0.1186	5	0.02371	0.1186						0
5	0.2397	10	0.02397	0.2397						0
6	0.6982	25	0.02793	0.6982						0
7	1.3916	50	0.02783	1.3916						0

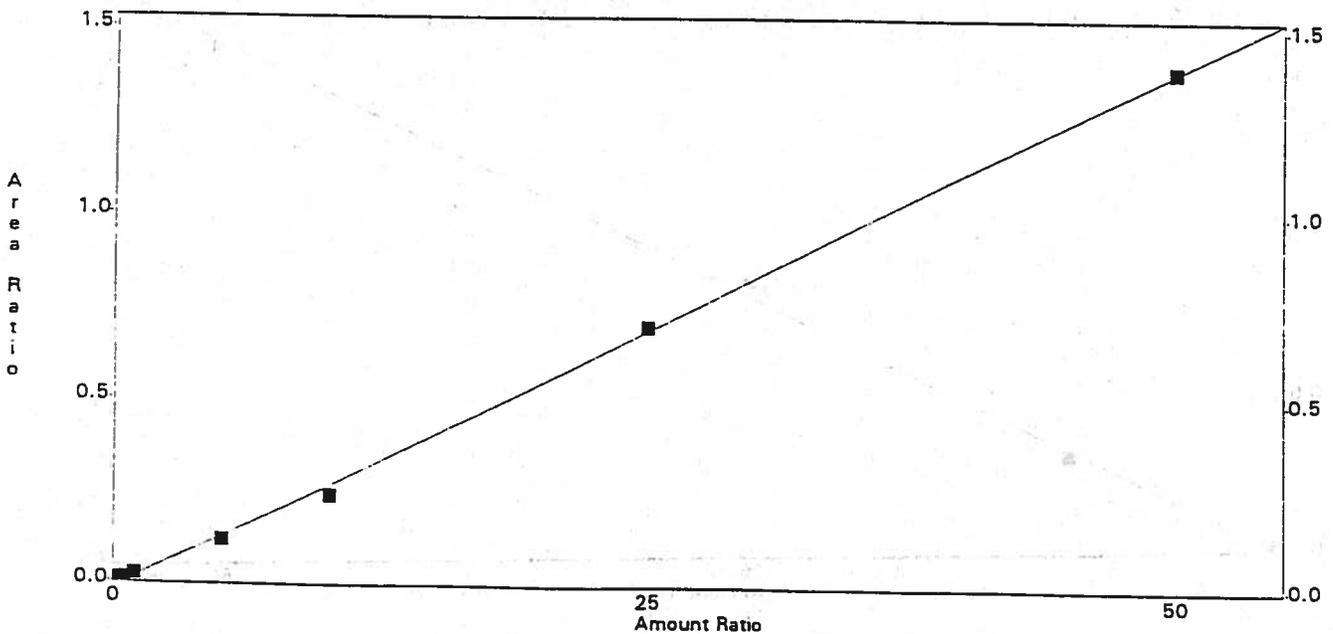
Lab Flag: Replace

Average RF: 0.0247605
 RF StdDev: 0.00232426
 %RSD: 9.38699

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 35.6361 x Area + 0.440252
 R² = 0.999223 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:33:55

Channel : A

Peak : 1,3-dcb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0123	0.4	0.0308	0.0123							0
2	0.0130	0.5	0.02605	0.0130							0
3	0.0288	1	0.02876	0.0288							0
4	0.1494	5	0.02988	0.1494							0
5	0.3092	10	0.03092	0.3092							0
6	0.8769	25	0.03508	0.8769							0
7	1.6459	50	0.03292	1.6459							0

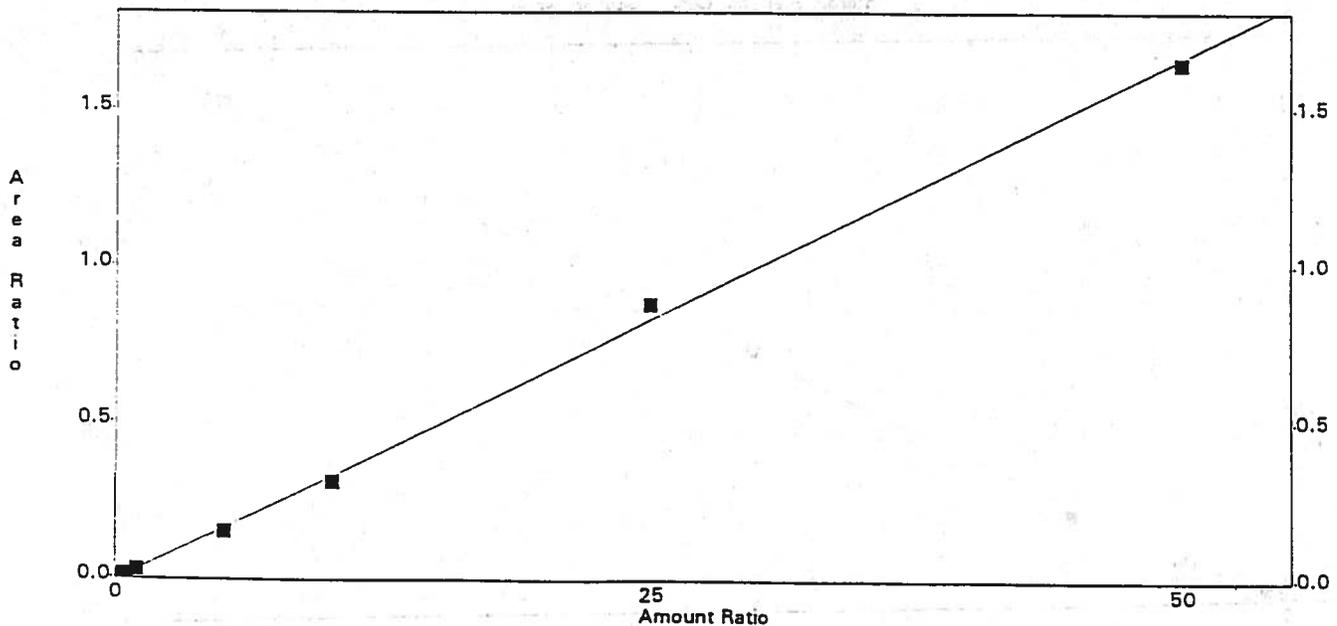
Calib Flag: Replace

Average RF: 0.0306298
RF StdDev: 0.00289189
RF %RSD: 9.44141

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 29.9224 x Area + 0.152423
R^2 = 0.998627 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:55
 Channel : A
 Peak : 1,4-dcb

* - Replicate Not Used

Rel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic WSTD	Old Area Ratio
1	0.0162	0.4	0.04049	0.0162						0
2	0.0164	0.5	0.03273	0.0164						0
3	0.0357	1	0.03567	0.0357						0
4	0.1491	5	0.02982	0.1491						0
5	0.3024	10	0.03024	0.3024						0
6	0.8553	25	0.03421	0.8553						0
7	1.6409	50	0.03282	1.6409						0

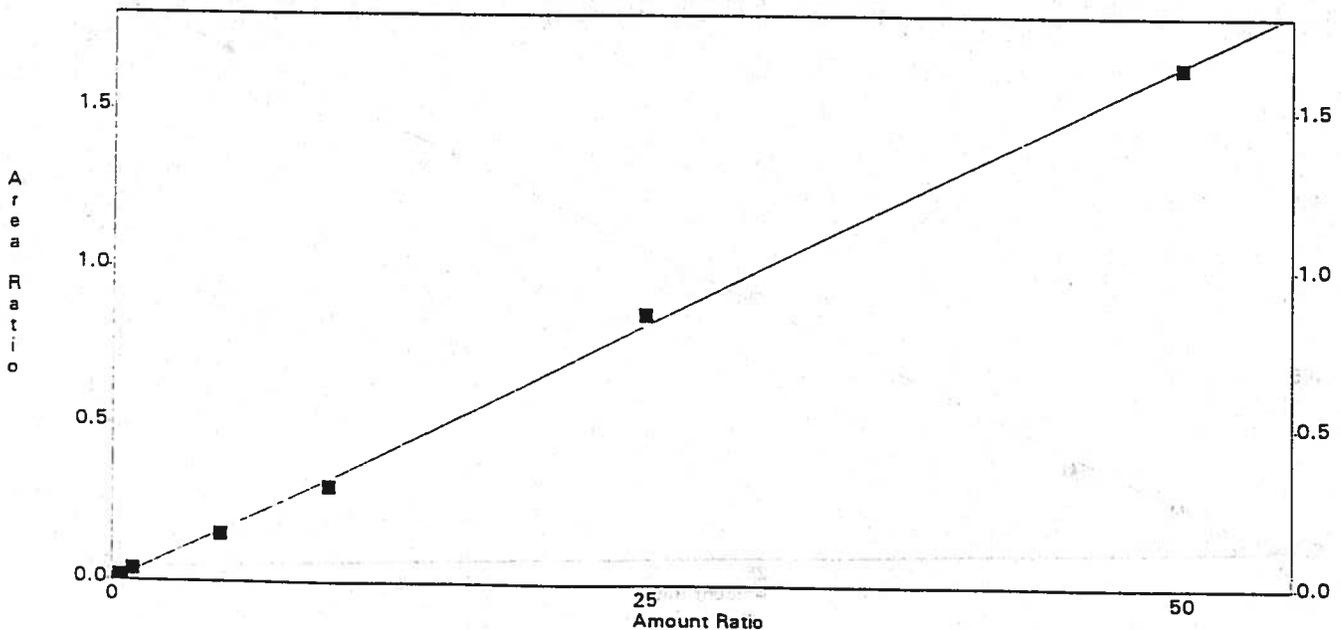
Flag: Replace

Average RF: 0.0337091
 RF StdDev: 0.00363002
 F WSTD: 10.7627

Definition: Area / Amount
 Weighting Method: None
 Fit through Zero: No

Linear Fit: Amount = 30.1994 x Area + 0.117624
 R² = 0.999118

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:55
 Channel : A
 Peak : n-butylbenzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0113	0.4	0.02818	0.0113							0
2	0.0116	0.5	0.02316	0.0116							0
3	0.0261	1	0.02608	0.0261							0
4	0.1261	5	0.02523	0.1261							0
5	0.2508	10	0.02508	0.2508							0
6	0.7442	25	0.02977	0.7442							0
7	1.4756	50	0.02951	1.4756							0

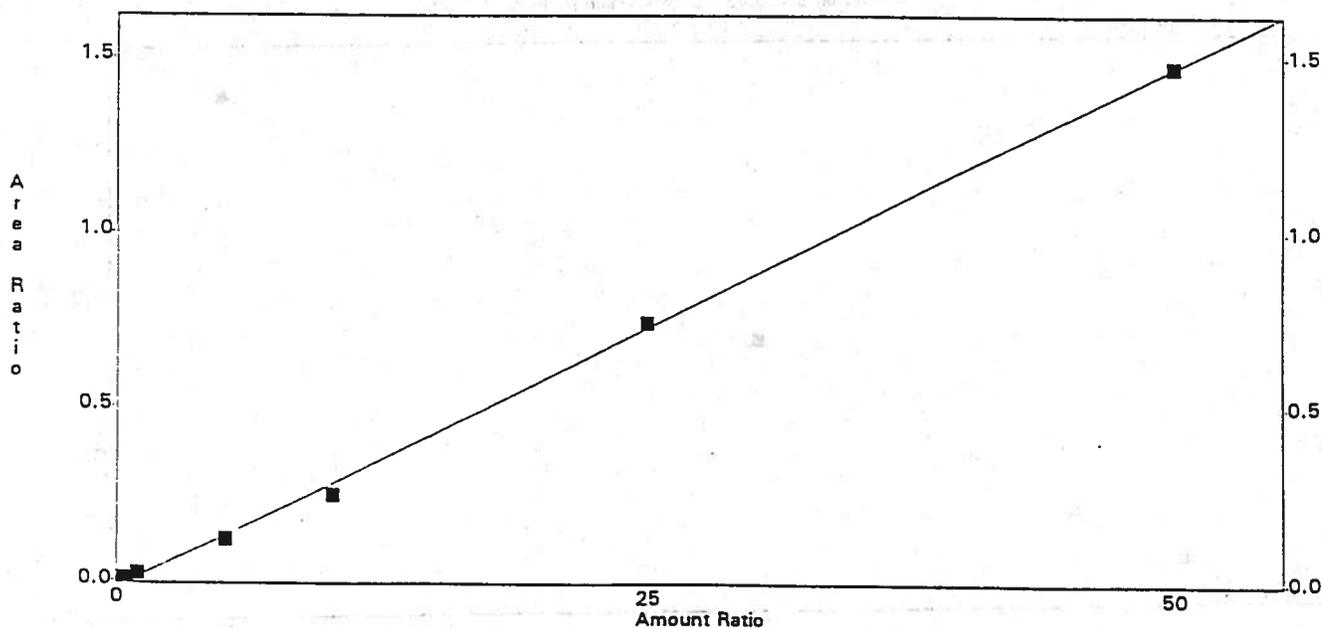
Calib Flag: Replace

Average RF: 0.0267138
 RF StdDev: 0.00249011
 RF ARSD: 9.32142

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 33.5867 x Area + 0.434645
 $R^2 = 0.995038$

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:33:56

Channel : A

Peak : 1,2-dcb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic 5SD	Replic 4RSD	Old Area Ratio
1	0.0127	0.4	0.02164	0.0127							0
2	0.0130	0.5	0.02599	0.0130							0
3	0.0258	1	0.02578	0.0258							0
4	0.1214	5	0.02427	0.1214							0
5	0.2496	10	0.02496	0.2496							0
6	0.7084	25	0.02834	0.7084							0
7	1.3439	50	0.02688	1.3439							0

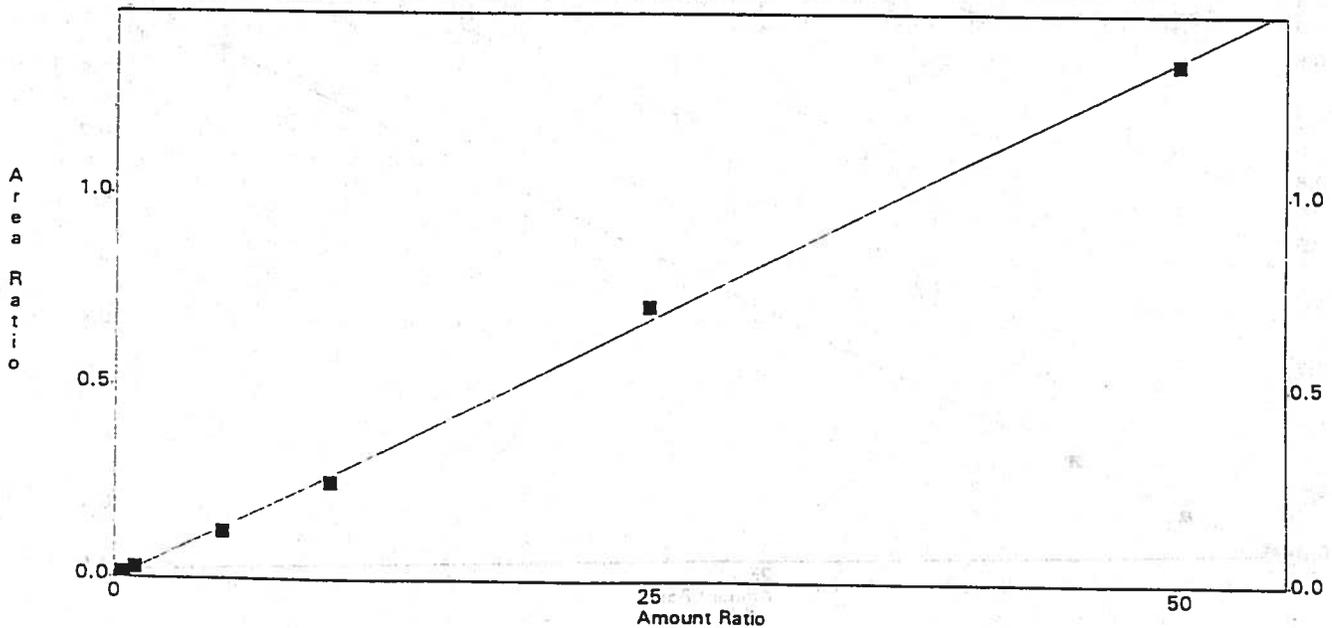
Lib Flag: Replace

Average RF: 0.0268366
 RF StDev: 0.00249231
 RF RSD: 9.28698

Definition: Area / Amount
 Weighing Method: None
 Fit Through Zero: No

Linear Fit: Amount = 36.7668 x Area - 0.13071
 R² = 0.998877 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:33:56
 Channel : A
 Peak : 1,2,4-tcb

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0066	0.4	0.01658	0.0066*							0
2	0.0051	0.5	0.0103	0.0051							0
3	0.0106	1	0.0106	0.0106							0
4	0.0657	5	0.01313	0.0657							0
5	0.1594	10	0.01594	0.1594							0
6	0.4816	25	0.01927	0.4816*							0
7	0.8386	50	0.01677	0.8386							0

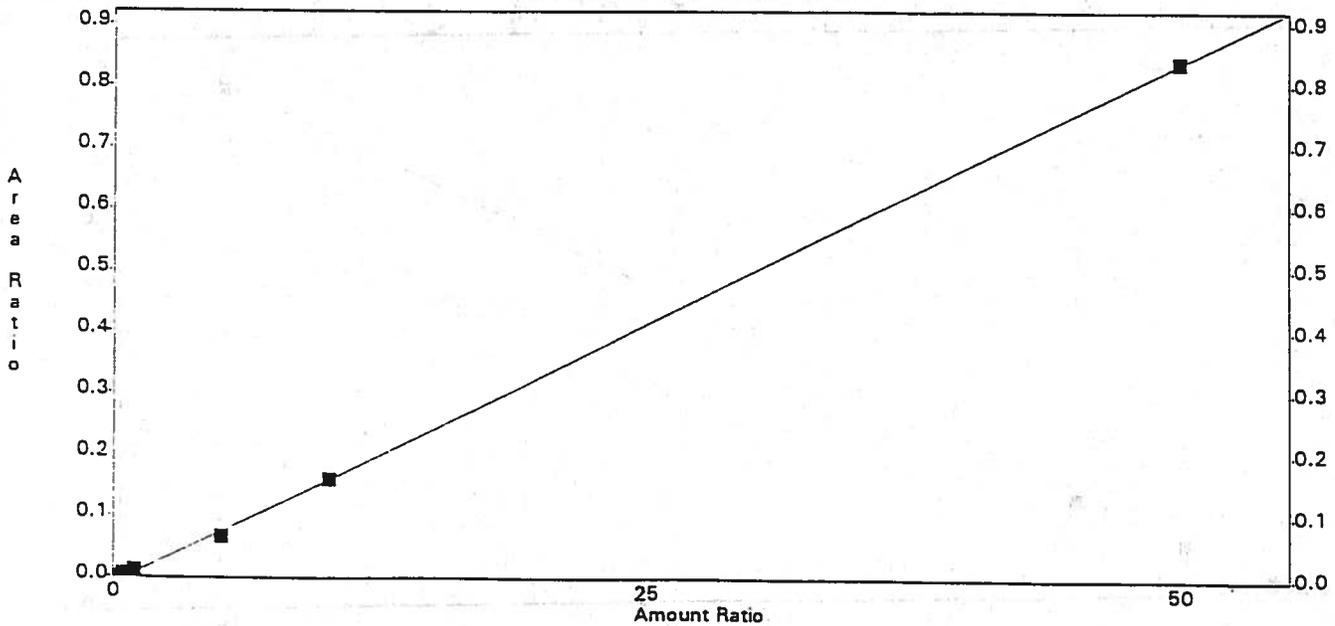
Calib Flag: Replace

Average RF: 0.0133484
 RF StdDev: 0.00297234
 RF %RSD: 22.2673

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 59.0056 x Area + 0.561391
 R^2 = 0.999719 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:33:56

Channel : A

Peak : Hexachlorobutadiene

Vol Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0063	0.4	0.01579	0.0063*						0
2	0.3057	0.5	0.01139	0.0057						0
3	0.3106	1	0.01058	0.0106						0
4	0.0598	5	0.01195	0.0598						0
5	0.1041	10	0.01041	0.1041						0
6	0.3588	25	0.01435	0.3588*						0
7	0.5969	50	0.01194	0.5969						0

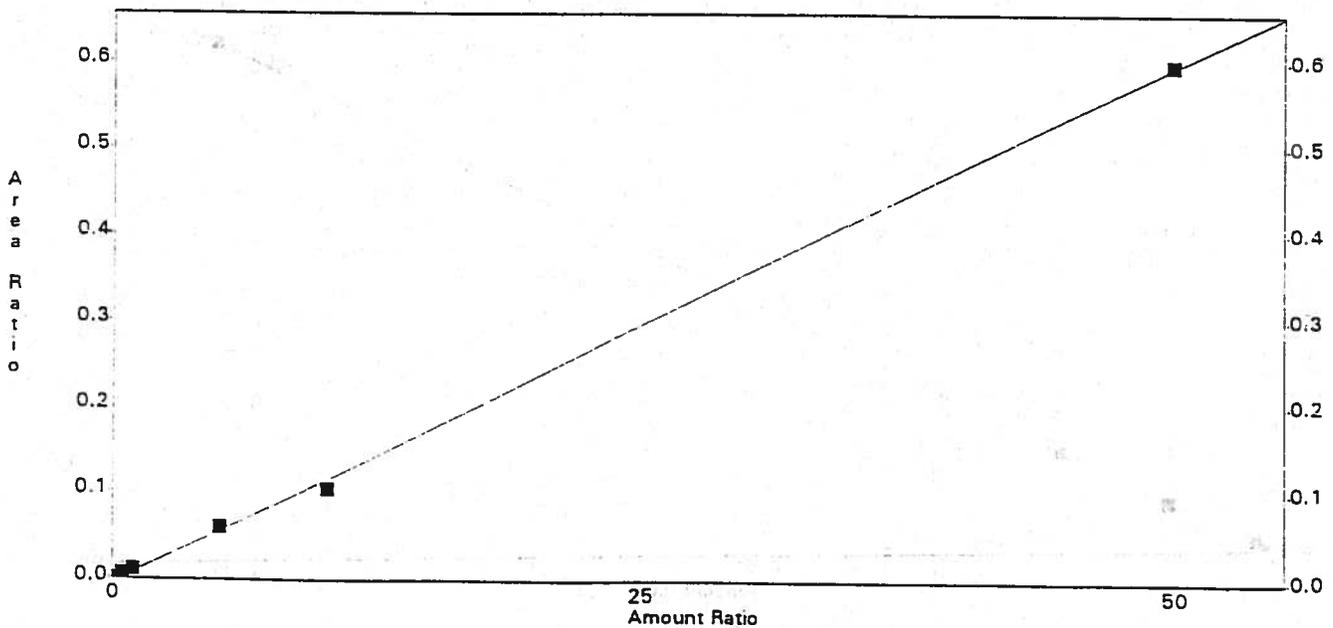
Lab Flag: Replace

Average RF: 0.011254
RF StdDev: 0.000732184
-- ARSD: 6.50602

Definition: Area / Amount
weighting Method: None
Fit Through Zero: No

near Fit: Amount = 83.4201 x Area + 0.336111
R^2 = 0.999292

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:33:57
 Channel : A
 Peak : Napthalene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0092	0.4	0.02306	0.0092*							0
2	0.0079	0.5	0.01581	0.0079							0
3	0.0213	1	0.02133	0.0213							0
4	0.1069	5	0.02137	0.1069							0
5	0.2216	10	0.02216	0.2216							0
6	0.6353	25	0.02541	0.6353*							0
7	1.1349	50	0.0227	1.1349							0

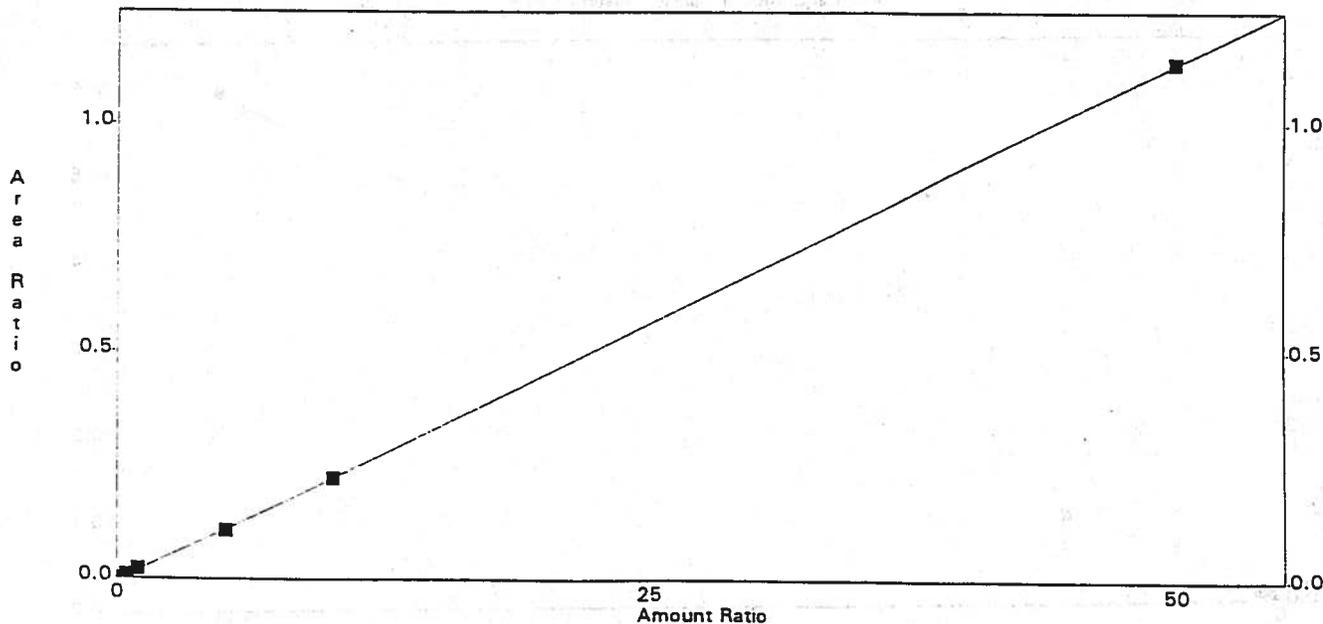
Calib Flag: Replace

Average RF: 0.0206737
 RF StdDev: 0.00277985
 RF ARSD: 13.4463

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 43.9074 x Area + 0.152515
 R^2 = 0.999978

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:33:57

Channel : A

Peak : 1,2,3-tcb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0080	0.4	0.0195	0.0080							0
2	0.0086	0.5	0.01713	0.0086							0
3	0.0082	1	0.908234	0.0082							0
4	0.0616	5	0.01231	0.0616							0
5	0.1472	10	0.01472	0.1472							0
6	0.4413	25	0.01765	0.4413							0
7	0.7113	50	0.01423	0.7113							0

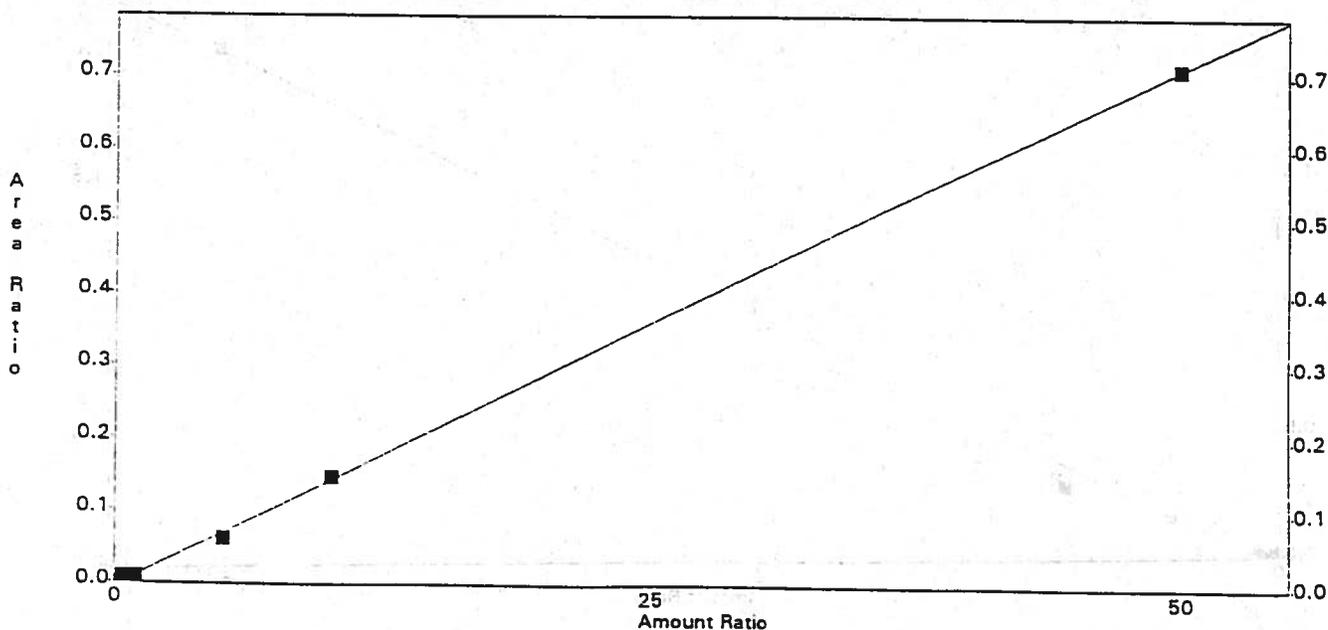
ib Flag: Replace

Average RF: 0.0130777
RF StdDev: 0.00422484
RF ARSD: 30.4433

Definition: Area / Amount
Lighting Method: None
Fit Through Zero: No

Quadratic Fit: Amount = 4.18267 x Area² + 66.8665 x Area + 0.115097
R² = 0.999665

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:38:50

Channel : B

Peak : DCDFM

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic 4RSD	Old Area Ratio
1	0.0156	0.4	0.03908	0.0156							0
2	0.0051	0.5	0.01017	0.0051*							0
3	0.0357	1	0.03567	0.0357							0
4	0.1562	5	0.03125	0.1562							0
5	0.2879	10	0.02879	0.2879							0
6	0.9986	25	0.03994	0.9986							0
7	2.0115	50	0.04023	2.0115							0

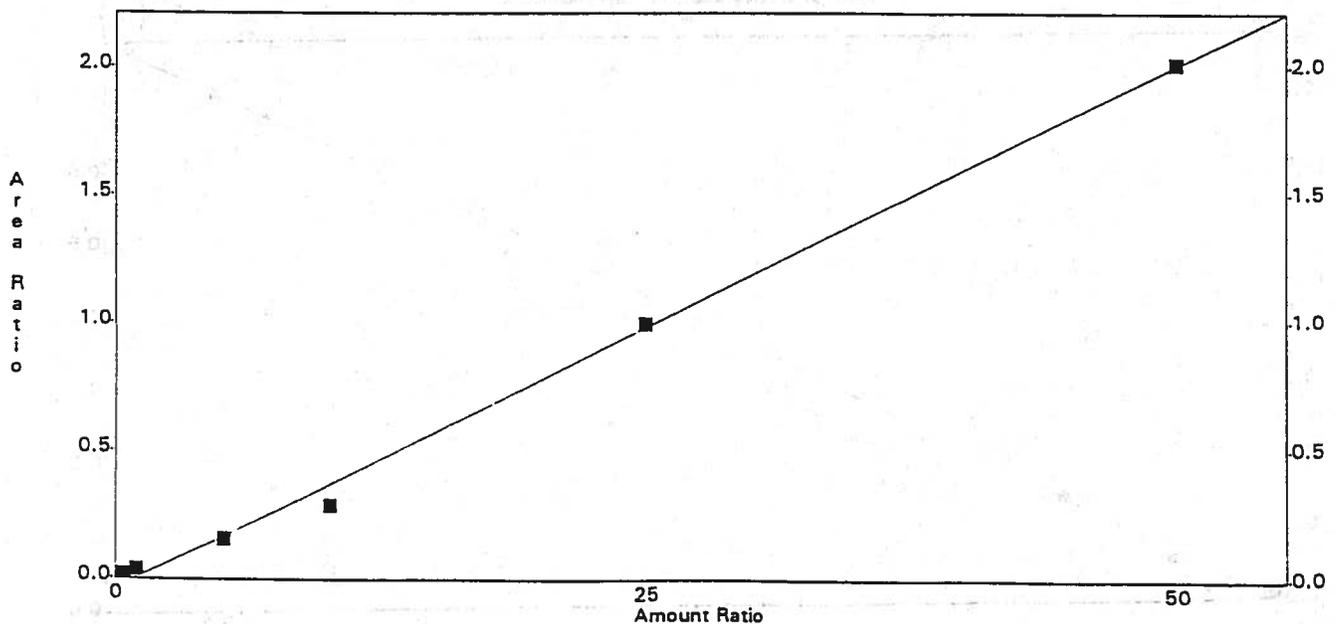
Calib Flag: Replace

Average RF: 0.0358252
RF StdDev: 0.00484725
RF 4RSD: 13.5303

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 24.4337 x Area + 0.958303
R² = 0.996883 ✓

Internal Standard Curve - Scaling: None



Method : C:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:51
 Channel : B
 Peak : VINYL CHLORIDE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.3177	0.4	0.04417	0.0177*							0
2	0.0076	0.5	0.01529	0.0076							0
3	0.0145	1	0.01451	0.0145							0
4	0.4112	5	0.08225	0.4112							0
5	0.5945	10	0.05945	0.5945							0
6	1.4220	25	0.05688	1.4220							0
7	2.7931	50	0.05566	2.7931							0

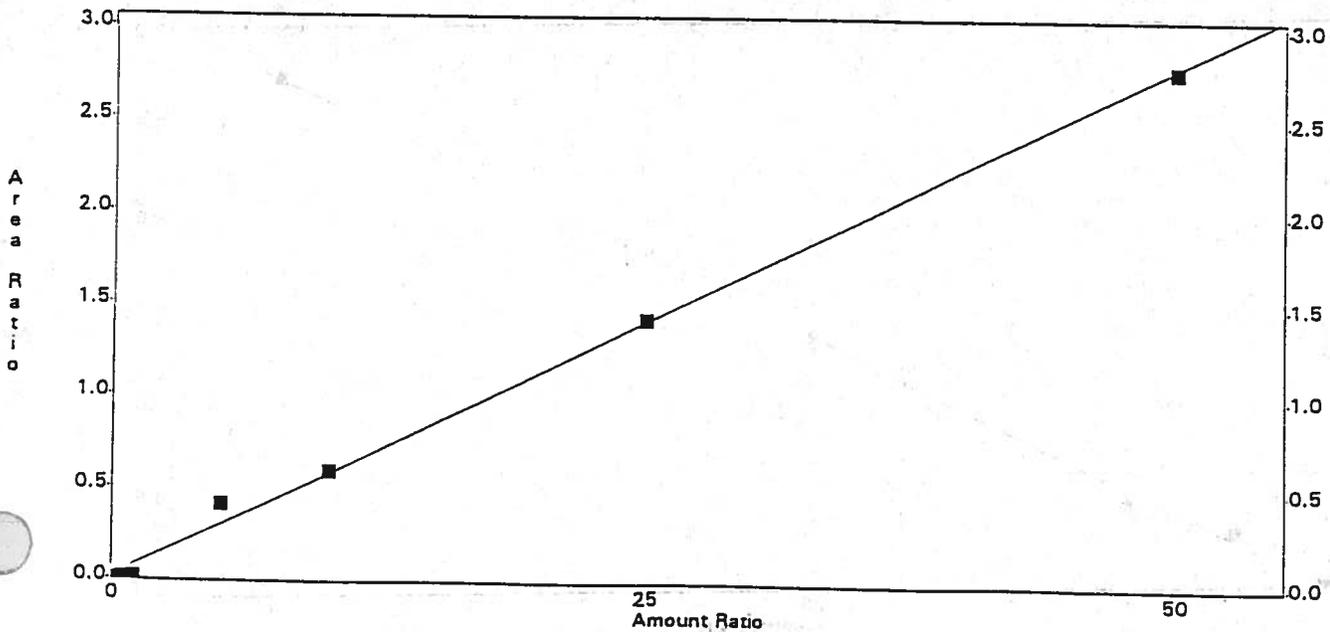
Calib Flag: Replace

Average RF: 0.0473395
 RF StdDev: 0.0269463
 RF %RSD: 56.9215

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 17.9731 x Area - 0.425385
 R² = 0.996719 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:50
 Channel : B
 Peak : CHLOROMETHANE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0085	0.4	0.02129	0.0085*							
2	0.0052	0.5	0.01032	0.0052							0
3	0.0077	1	0.007693	0.0077							0
4	0.2952	5	0.05705	0.2952							0
5	0.4617	10	0.04617	0.4617							0
6	1.3530	25	0.05436	1.3530							0
7	2.7624	50	0.05525	2.7624							0

Lib Flag: Replace

Average RF: 0.0384729
 RF StdDev: 0.0221424
 RF %RSD: 60.1527

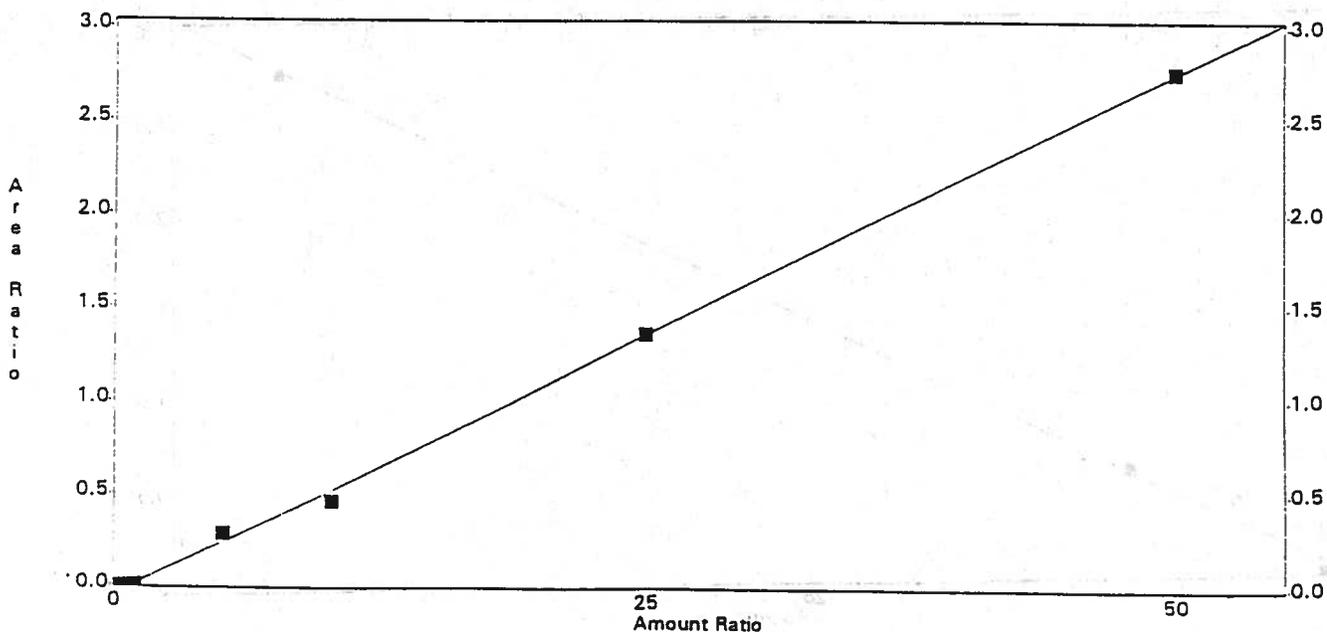
Definition: Area / Amount

Lighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 17.9768 x Area + 0.706678
 R² = 0.999002 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:51
 Channel : B
 Peak : BROMOMETHANE

* - Replicate Not Used

Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0004	0.4	0.001064	0.0004						0
2	0.0006	0.5	0.00115	0.0006						0
3	0.0013	1	0.001299	0.0013						0
4	0.0568	5	0.01137	0.0568						0
5	0.1301	10	0.01301	0.1301						0
6	0.3874	25	0.01549	0.3874						0
7	0.8830	50	0.01766	0.8830						0

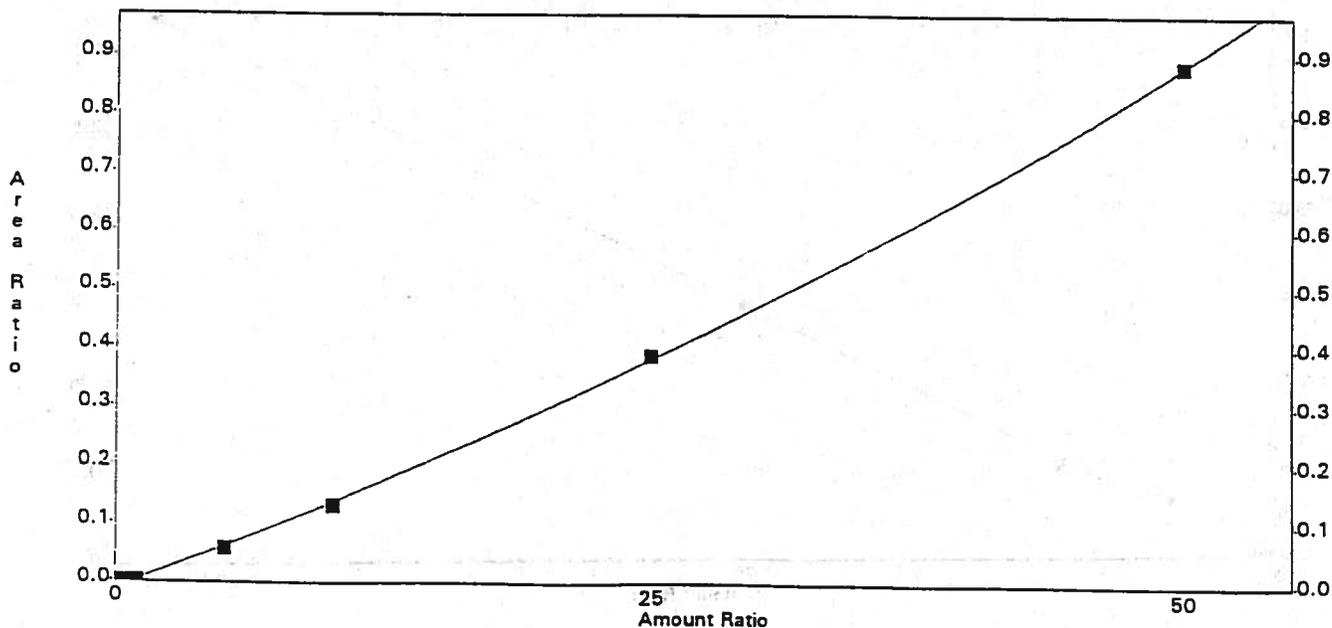
ib Flag: Replace

Average RF: 0.00872094
 RF StdDev: 0.00732853
 RF ARSD: 84.0338

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = -15.5404 x Area^2 + 69.4285 x Area + 0.760336
 R^2 = 0.999653 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:51
 Channel : B
 Peak : CHLOROETHANE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0057	0.4	0.01418	0.0057							0
2	0.0097	0.5	0.01945	0.0097							0
3	0.0330	1	0.03298	0.0330							0
4	0.3119	5	0.06238	0.3119							0
5	0.5468	10	0.05468	0.5468							0
6	1.4707	25	0.05883	1.4707							0
7	2.9827	50	0.05965	2.9827							0

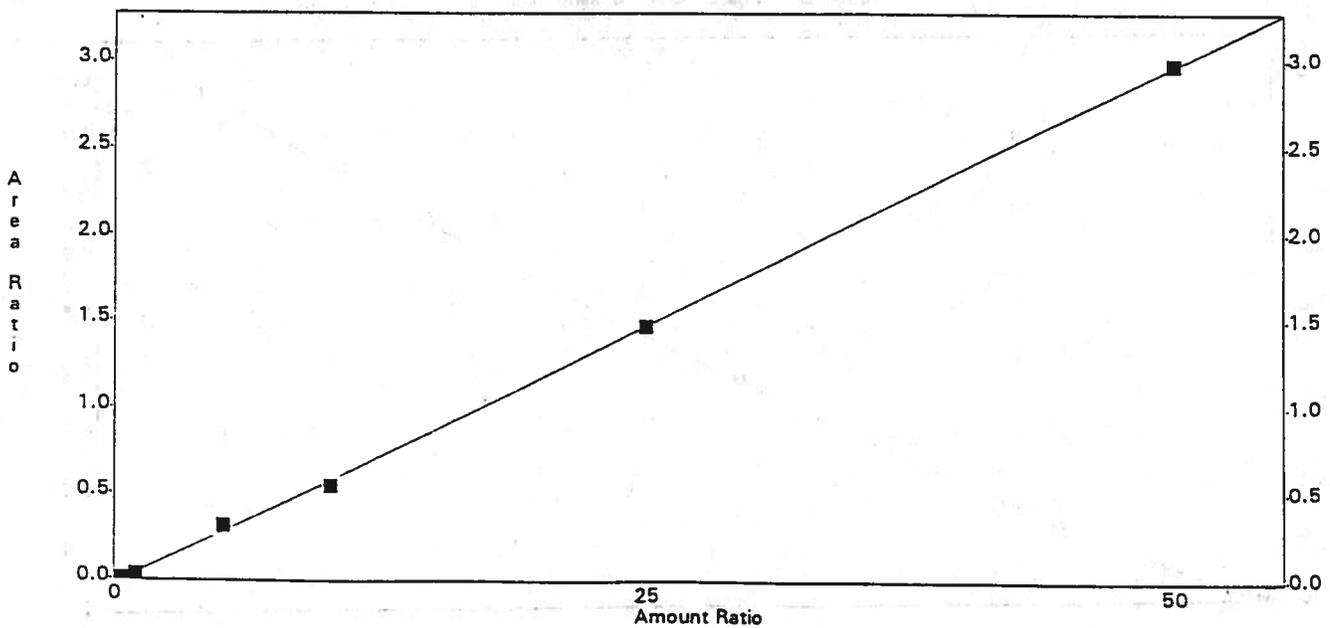
Calib Flag: Replace

Average RF: 0.0431646
 RF StdDev: 0.0205156
 RF %RSD: 47.5287

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 16.6751 x Area + 0.359099
 R² = 0.999696 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:38:52
 Channel : B
 Peak : TCFM

* - Replicate Not Used

el	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0141	0.4	0.0352	0.0141							0
2	0.0098	0.5	0.01961	0.0098							0
3	0.0422	1	0.04217	0.0422							0
4	0.4208	5	0.08416	0.4208							0
5	0.6739	10	0.06739	0.6739							0
6	2.0790	25	0.08316	2.0790							0
7	3.8314	50	0.07663	3.8314							0

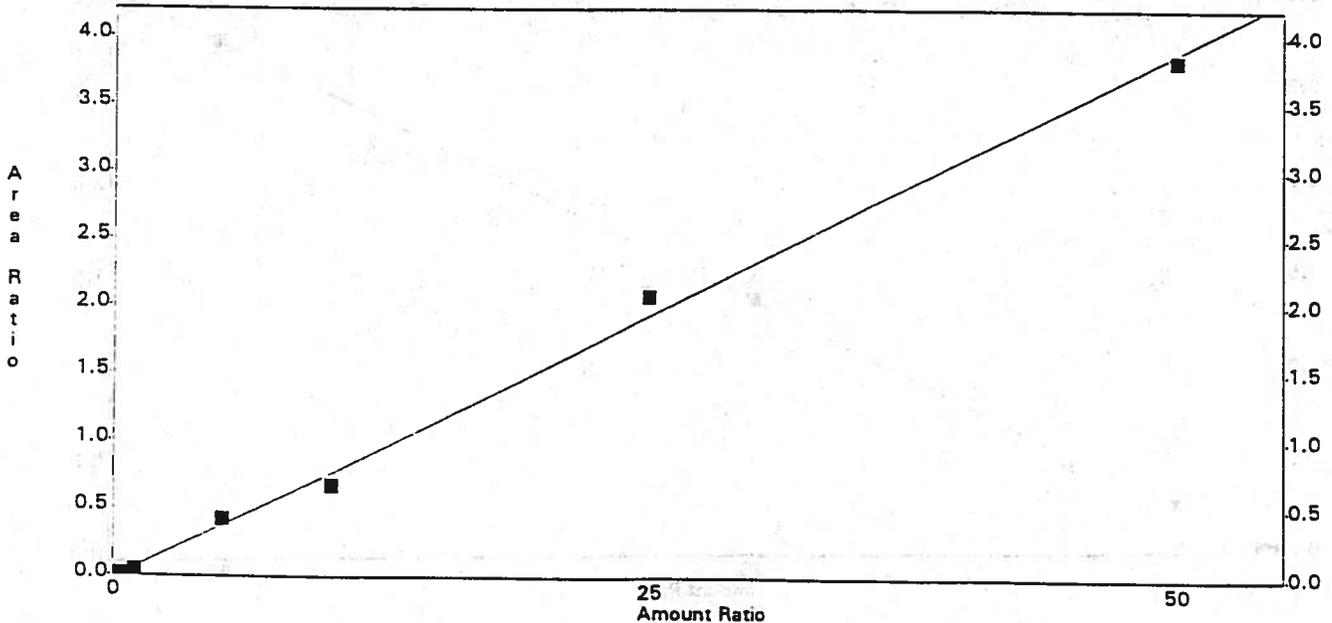
ib Flag: Replace

Average RF: 0.0647846
 RF StdDev: 0.0212007
 RF %RSD: 32.7249

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 12.7923 x Area + 0.178075
 $R^2 = 0.996966$

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:38:52
 Channel : B
 Peak : FREON 113

* - Replicate Not Used

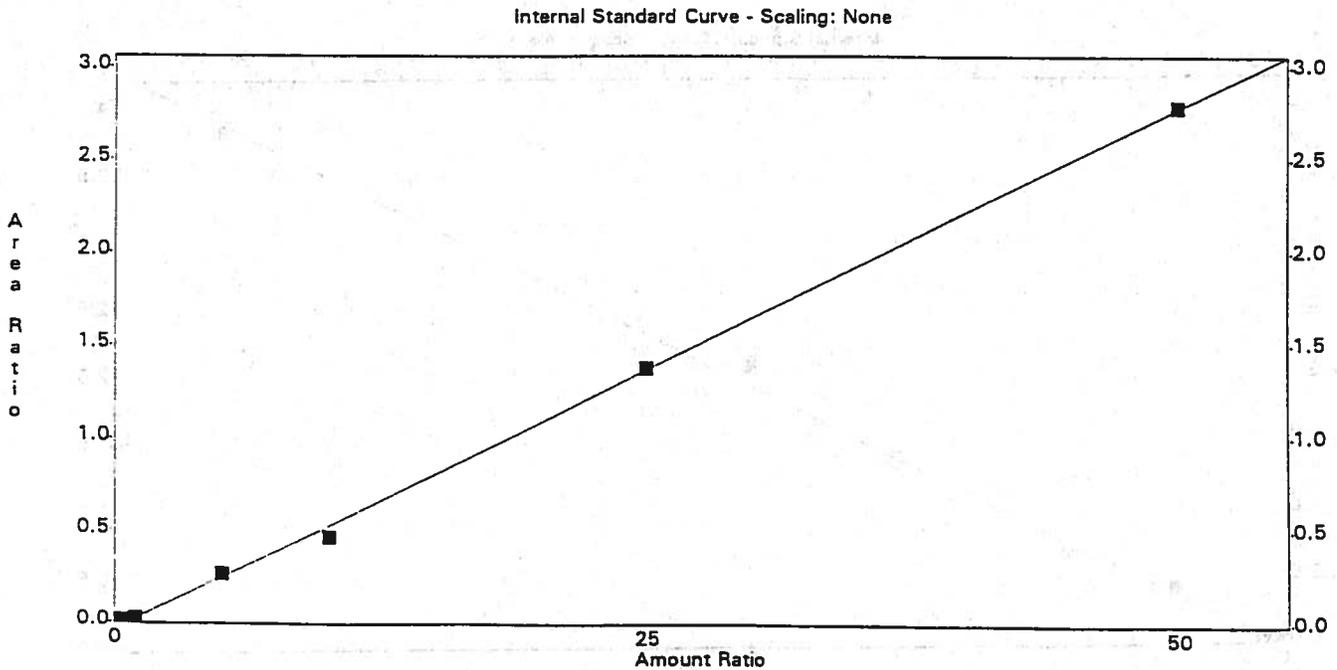
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0141	0.4	0.03532	0.0141							0
2	0.0111	0.5	0.0223	0.0111*							0
3	0.0261	1	0.02612	0.0261							0
4	0.2694	5	0.05388	0.2694							0
5	0.4691	10	0.04691	0.4691							0
6	1.3815	25	0.05526	1.3815							0
7	2.7866	50	0.05573	2.7866							0

Calib Flag: Replace

Average RF: 0.045375
 RF StdDev: 0.0122572
 RF %RSD: 26.9166

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 17.7598 x Area + 0.590939
 $R^2 = 0.999179 \checkmark$



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:38:52
 Channel : B
 Peak : 1,1-DCE

* - Replicate Not Used

rel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0093	0.4	0.02316	0.0093						0
2	0.0121	0.5	0.02421	0.0121						0
3	0.0322	1	0.03219	0.0322						0
4	0.3353	5	0.06707	0.3353						0
5	0.7923	10	0.07923	0.7923						0
6	1.8960	25	0.07584	1.8960						0
7	3.9782	50	0.07956	3.9782						0

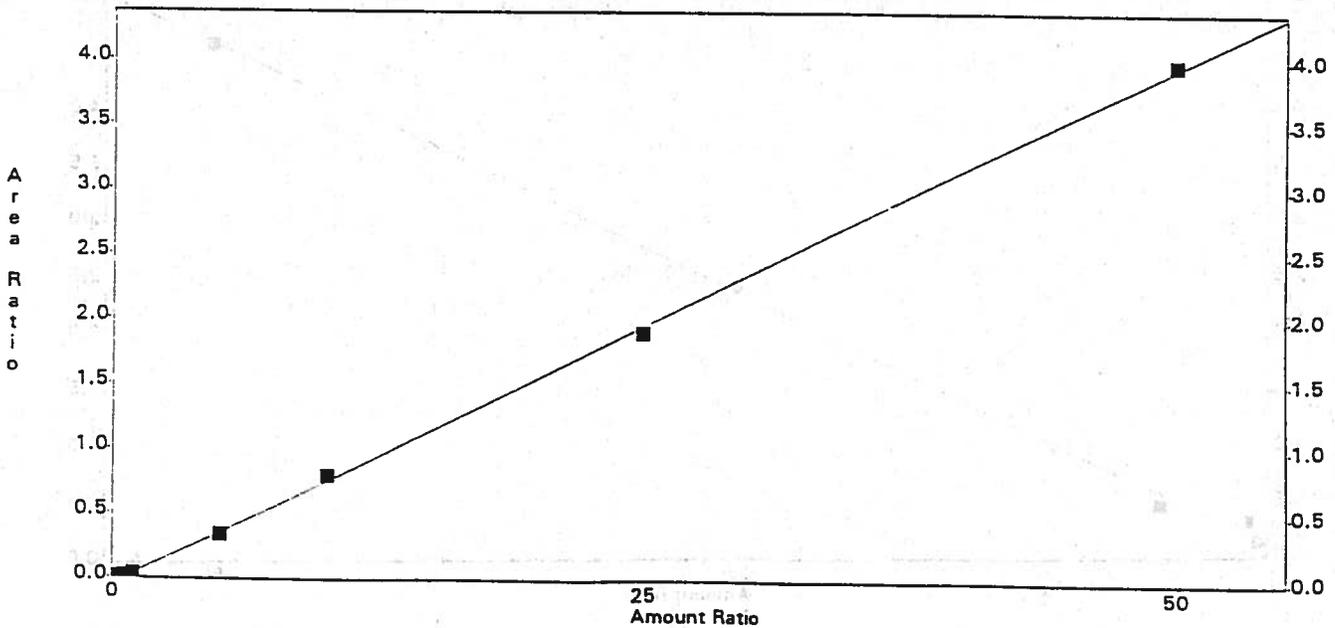
Lab Flag: Replace

Average RF: 0.0544669
 RF StdDev: 0.026616
 %RSD: 48.8663

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 12.5142 x Area + 0.515245
 R² = 0.999501 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:38:53

Channel : B

Peak : METH CHLORIDE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.2311	0.4	0.5777	0.2311*							0
2	0.1537	0.5	0.3073	0.1537							0
3	0.3377	1	0.3377	0.3377							0
4	0.4761	5	0.09522	0.4761							0
5	0.9879	10	0.09879	0.9879							0
6	2.4169	25	0.09668	2.4169							0
7	4.5976	50	0.09195	4.5976							0

Calib Flag: Replace

Average RF: 0.171265

RF StdDev: 0.117544

RF %RSD: 68.6327

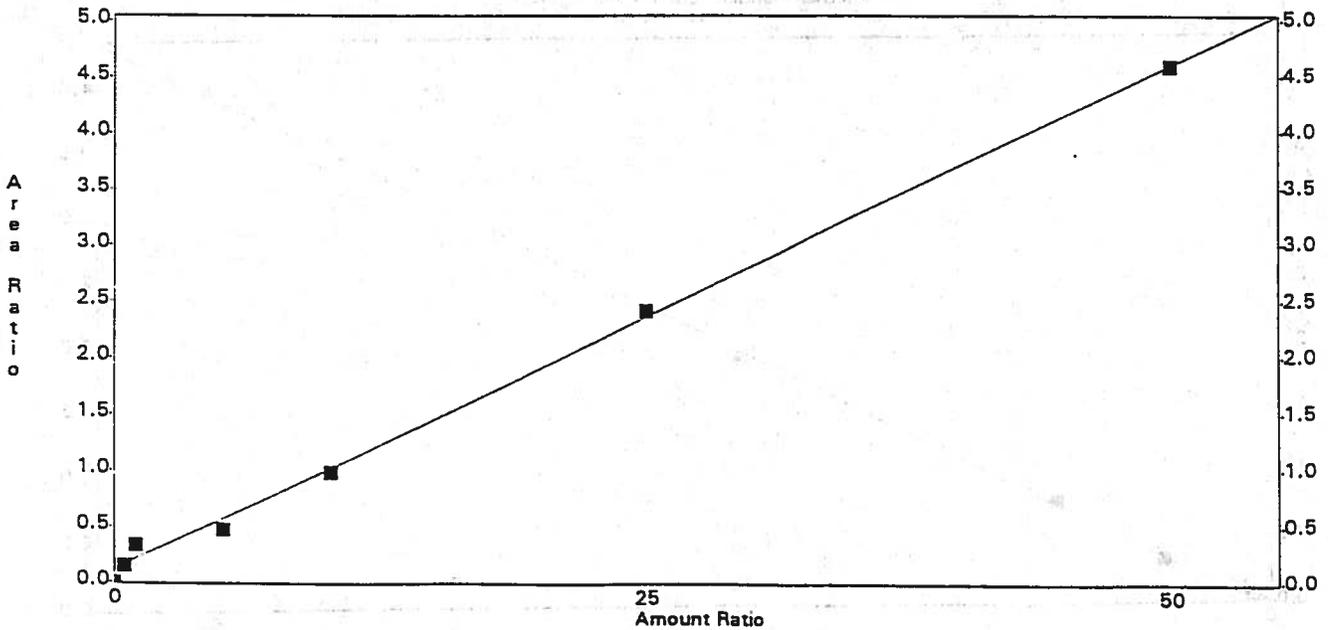
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 11.1461 x Area - 1.41287
R² = 0.998084 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

Printed : May 29, 1996 16:38:53

Channel : E

Peak : TRANS 1,2-DCE

* - Replicate Not Used

Vel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic 1RSD	Old Area Ratio
1	0.3106	0.4	0.02654	0.0106*						0
2	0.0204	0.5	0.02075	0.0104						0
3	0.0254	1	0.02544	0.0254						0
4	0.2949	5	0.05899	0.2949						0
5	0.6776	10	0.06776	0.6776						0
6	1.8207	25	0.07283	1.8207						0
7	3.6527	50	0.07305	3.6527						0

ab Flag: Replace

Average RF: 0.0531368

RF StdDev: 0.0238685

-- ARSD: 44.919

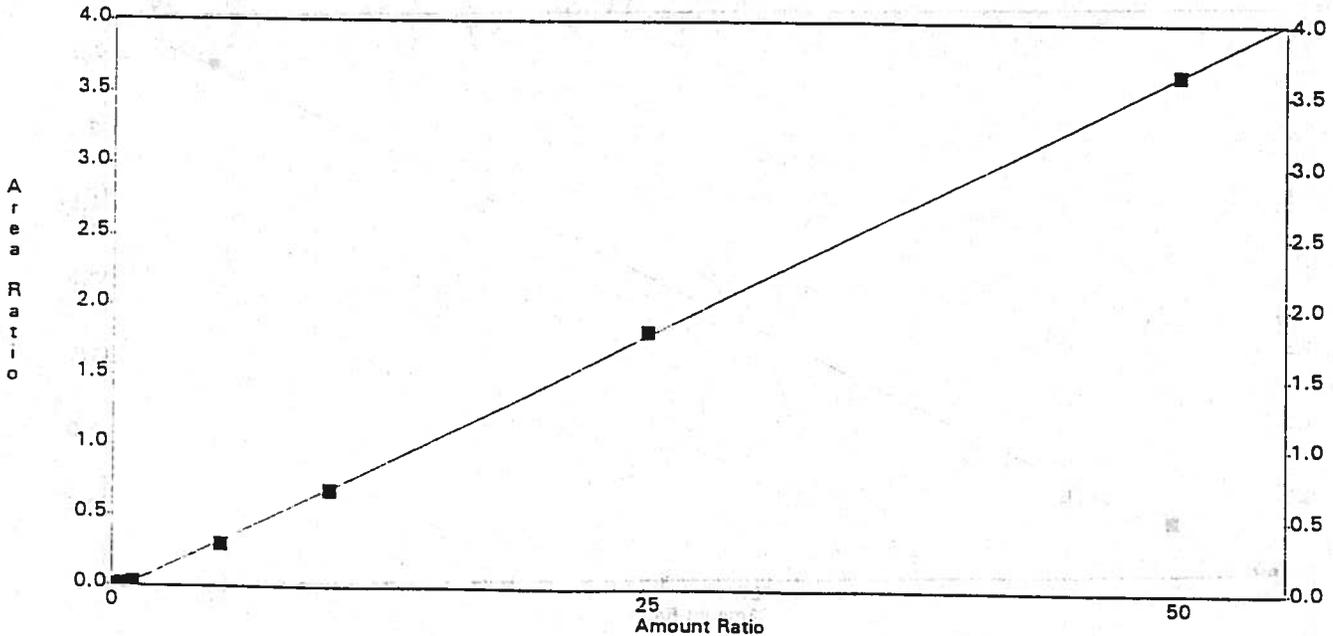
Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 13.4864 x Area + 0.680662
R² = 0.999832

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met * - Replicate Not Used
 Printed : May 29, 1996 16:38:53
 Channel : B
 Peak : 1,1-DCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0111	0.4	0.02766	0.0111							0
2	0.0027	0.5	0.005326	0.0027*							0
3	0.0312	1	0.03124	0.0312							0
4	0.3532	5	0.07065	0.3532							0
5	0.5472	10	0.05472	0.5472							0
6	1.9555	25	0.07822	1.9555*							0
7	3.4389	50	0.06878	3.4389							0

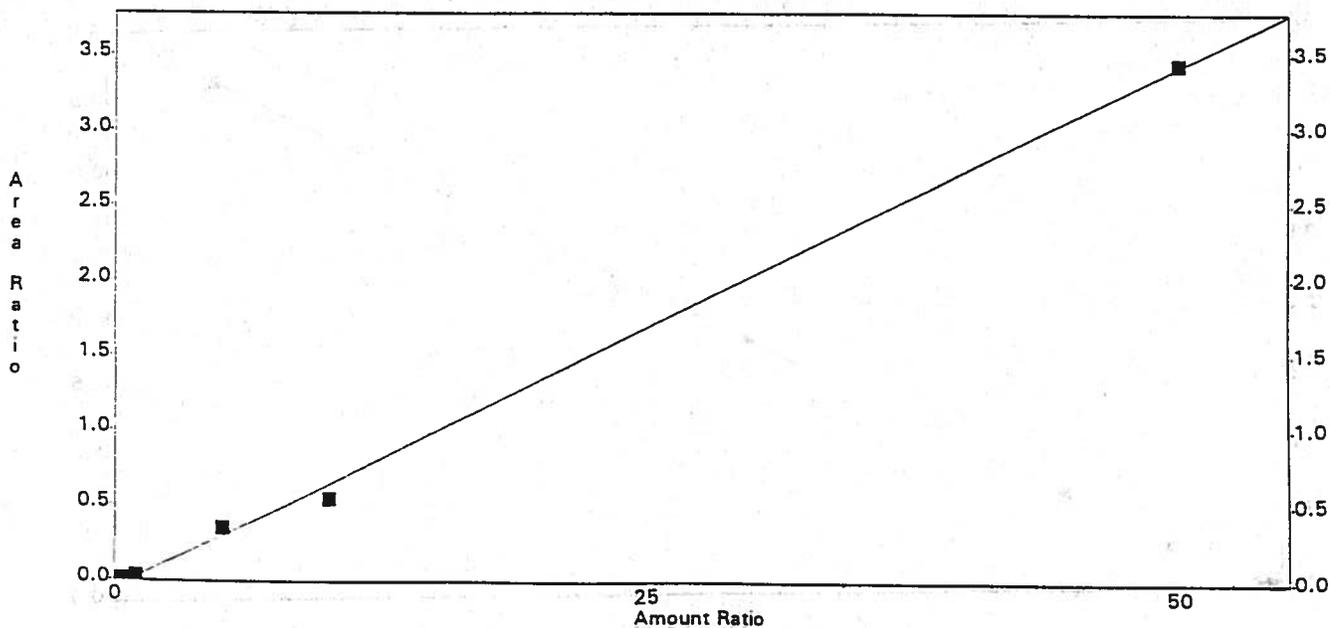
Calib Flag: Replace

Average RF: 0.0506105
 RF StdDev: 0.0203126
 RF %RSD: 40.135

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 14.3887 x Area + 0.670684
 R² = 0.998333 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:38:54

Channel : B

Peak : CIS 1,2-DCE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic VRSD	Old Area Ratio
1	0.0122	0.4	0.03051	0.0122							0
2	0.0159	0.5	0.03171	0.0159							0
3	0.0515	1	0.05151	0.0515							0
4	0.3435	5	0.06869	0.3435							0
5	0.6650	10	0.06650	0.6650							0
6	1.8840	25	0.07536	1.8840							0
7	3.9326	50	0.07865	3.9326							0

Calib Flag: Replace

Average RF: 0.0575623

RF StdDev: 0.0200063

RF VRSD: 14.7593

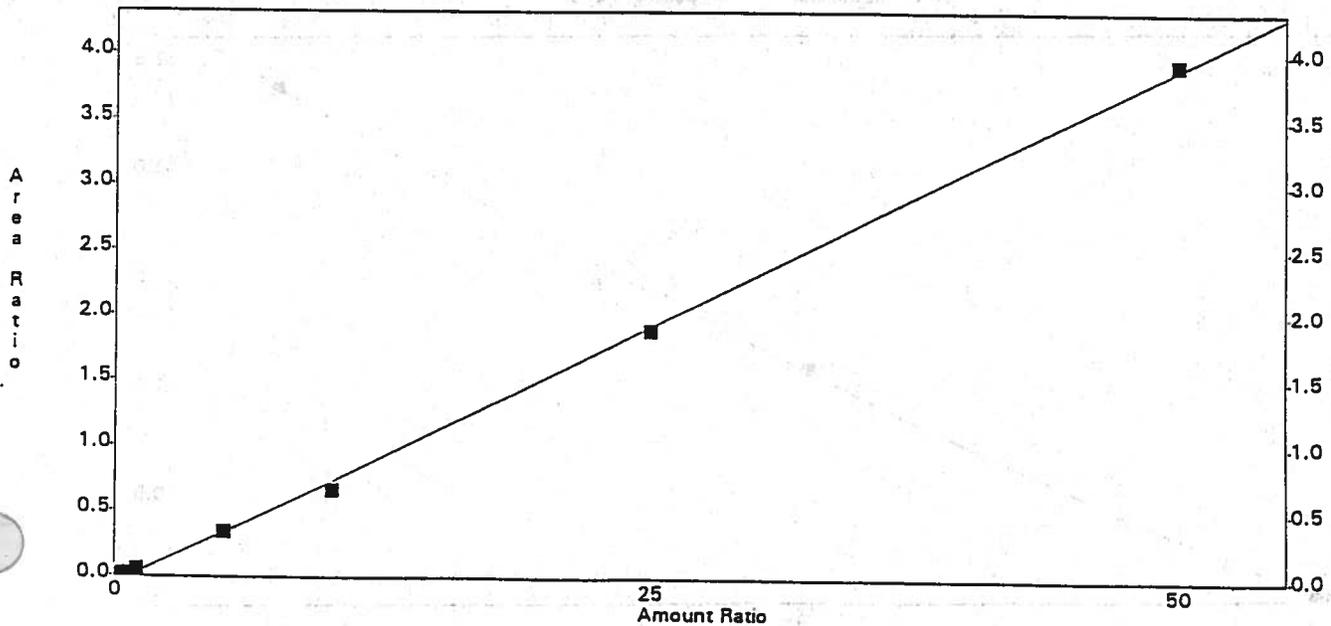
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 12.6503 x Area + 0.650514
R² = 0.999178

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:53
 Channel : B
 Peak : 2,2-DCPA

* - Replicate Not Used

Rel Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0044	0.4	0.01102	0.0044						0
2	0.0055	0.5	0.01095	0.0055						0
3	0.0356	1	0.0356	0.0356						0
4	0.1761	5	0.03521	0.1761						0
5	0.3767	10	0.03767	0.3767						0
6	1.0796	25	0.04313	1.0796						0
7	2.3789	50	0.04758	2.3789						0

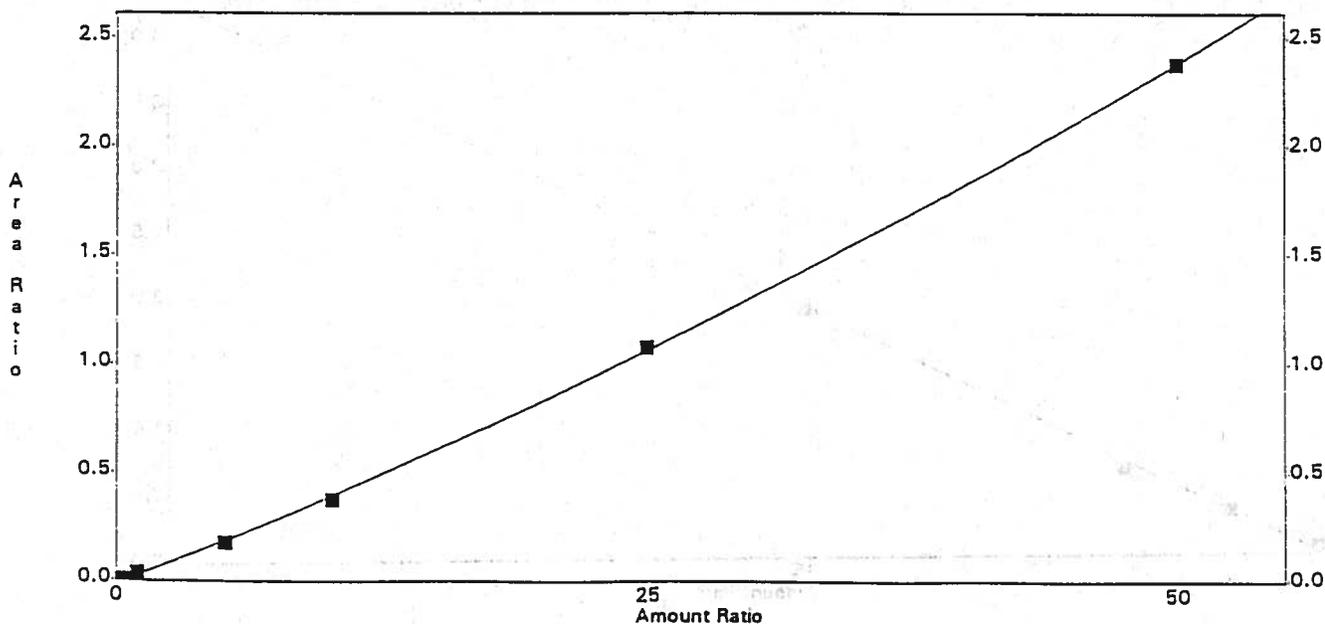
▬ Flag: Replace

Average RF: 0.0316005
 RF StDev: 0.0147499
 -- %RSD: 46.576

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

dratic Fit: Amount = -1.71292 x Area² + 24.9001 x Area + 0.410999
 R² = 0.999772

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:38:54
 Channel : B
 Peak : CHLOROFORM

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0188	0.4	0.04697	0.0188							0
2	0.0218	0.5	0.04358	0.0218							0
3	0.0736	1	0.0736	0.0736							0
4	0.4041	5	0.08082	0.4041							0
5	0.7577	10	0.07577	0.7577							0
6	2.2957	25	0.09183	2.2957							0
7	4.2503	50	0.08501	4.2503							0

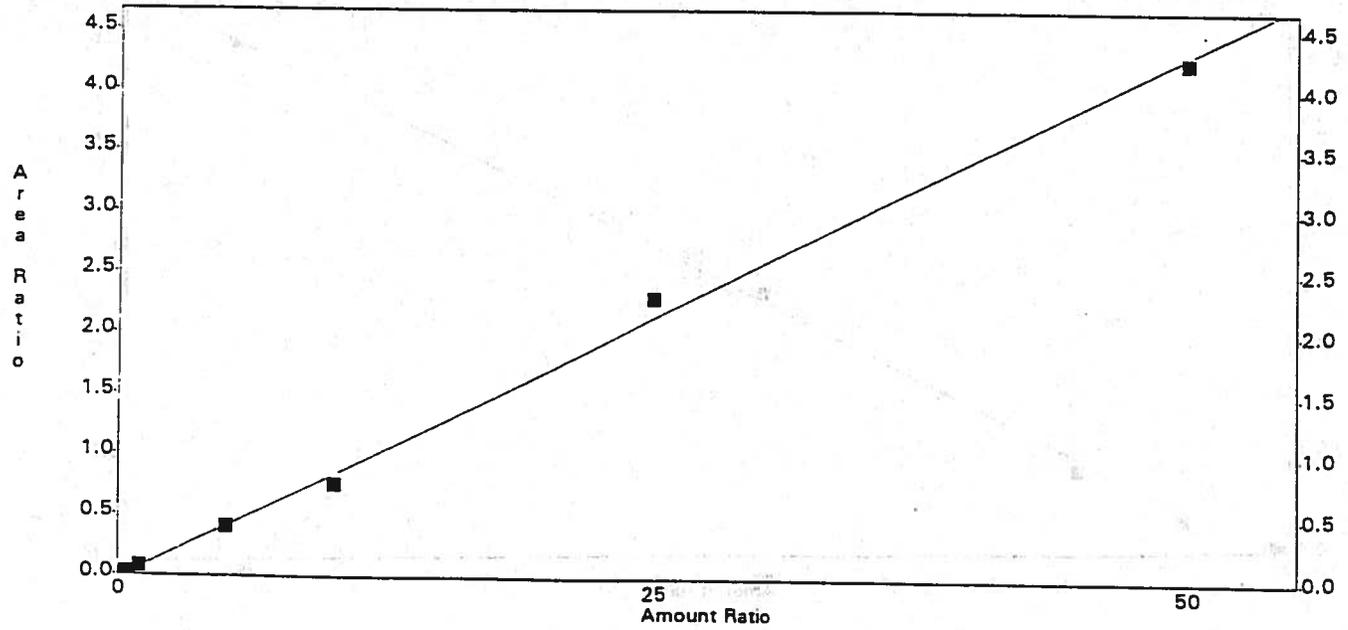
Control Flag: Replace

Average RF: 0.0710831
 RF StdDev: 0.0186407
 RF %RSD: 26.2235

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 11.5335 x Area + 0.240736
 R² = 0.99777 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:54
 Channel : B
 Peak : BCM

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0060	0.4	0.01492	0.0060							0
2	0.0068	0.5	0.01361	0.0068							0
3	0.0266	1	0.02658	0.0266							0
4	0.1554	5	0.03108	0.1554							0
5	0.4076	10	0.04076	0.4076							0
6	1.2691	25	0.05077	1.2691							0
7	2.4976	50	0.04995	2.4976							0

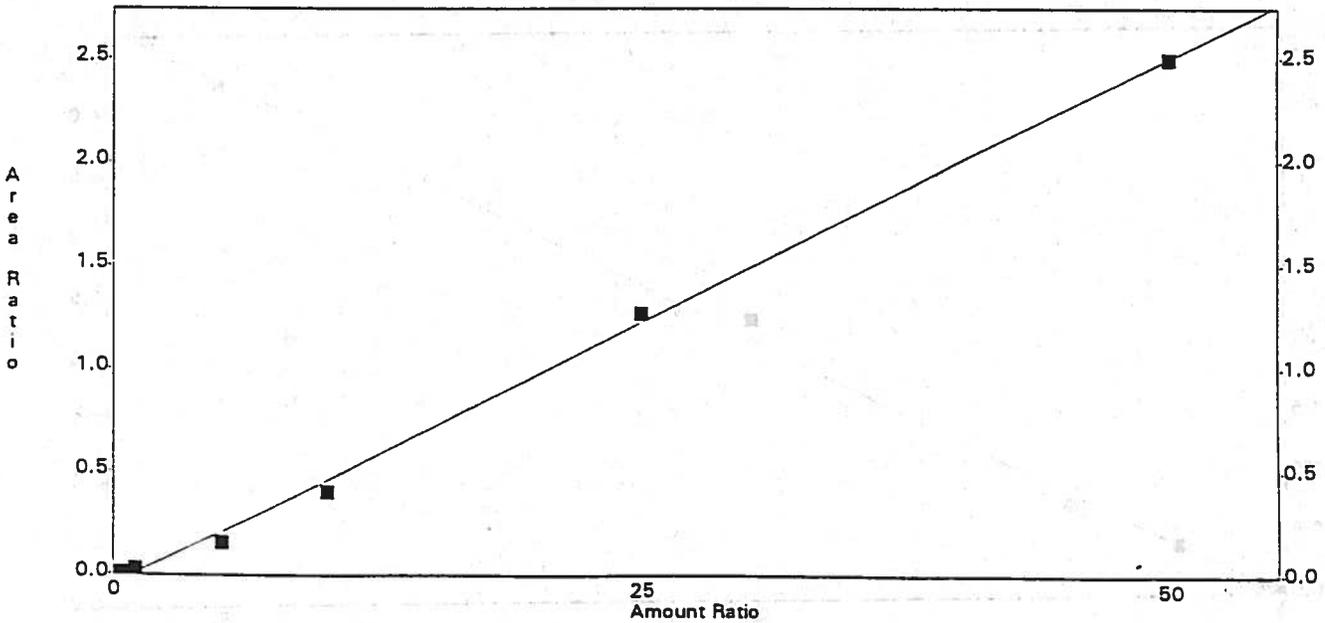
Calib Flag: Replace

Average RF: 0.032524
 RF StdDev: 0.0153245
 RF %RSD: 47.1175

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 19.6006 x Area + 0.89495
 R² = 0.998135 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:38:55
 Channel : B
 Peak : 1,1,1-TCA

* - Replicate Not Used

Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic WRSD	Old Area Ratio
1	0.0224	0.4	0.05597	0.0224						0
2	0.0177	0.5	0.03537	0.0177						0
3	0.0567	1	0.05666	0.0567						0
4	0.3019	5	0.06039	0.3019						0
5	0.7068	10	0.07068	0.7068						0
6	1.8951	25	0.0758	1.8951						0
7	3.7038	50	0.07408	3.7038						0

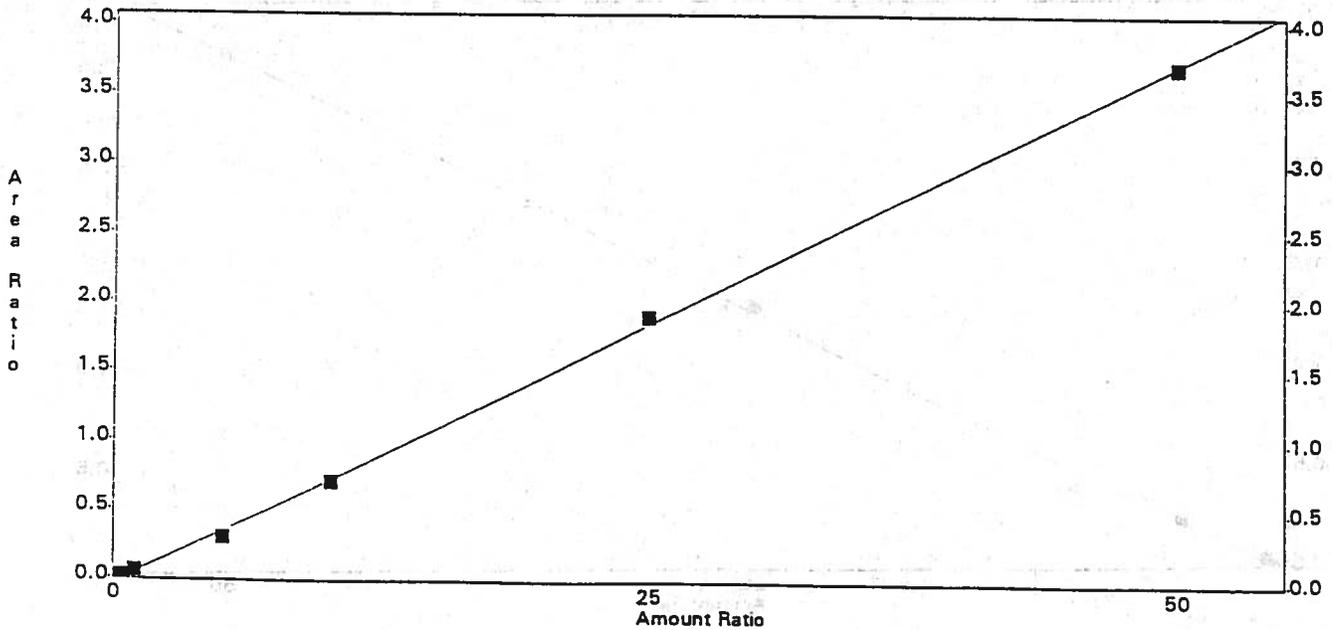
Ch Flag: Replace

Average RF: 0.065597
 RF StdDev: 0.00896291
 RF WRSD: 13.6636

F Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 13.3324 x Area + 0.374935
 R² = 0.999482 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:55
 Channel : B
 Peak : 1,1-DCPE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0124	0.4	0.03109	0.0124							0
2	0.0128	0.5	0.02567	0.0128							0
3	0.0402	1	0.04021	0.0402							0
4	0.2335	5	0.04669	0.2335							0
5	0.4144	10	0.04144	0.4144							0
6	1.3117	25	0.05247	1.3117							0
7	2.5831	50	0.05166	2.5831							0

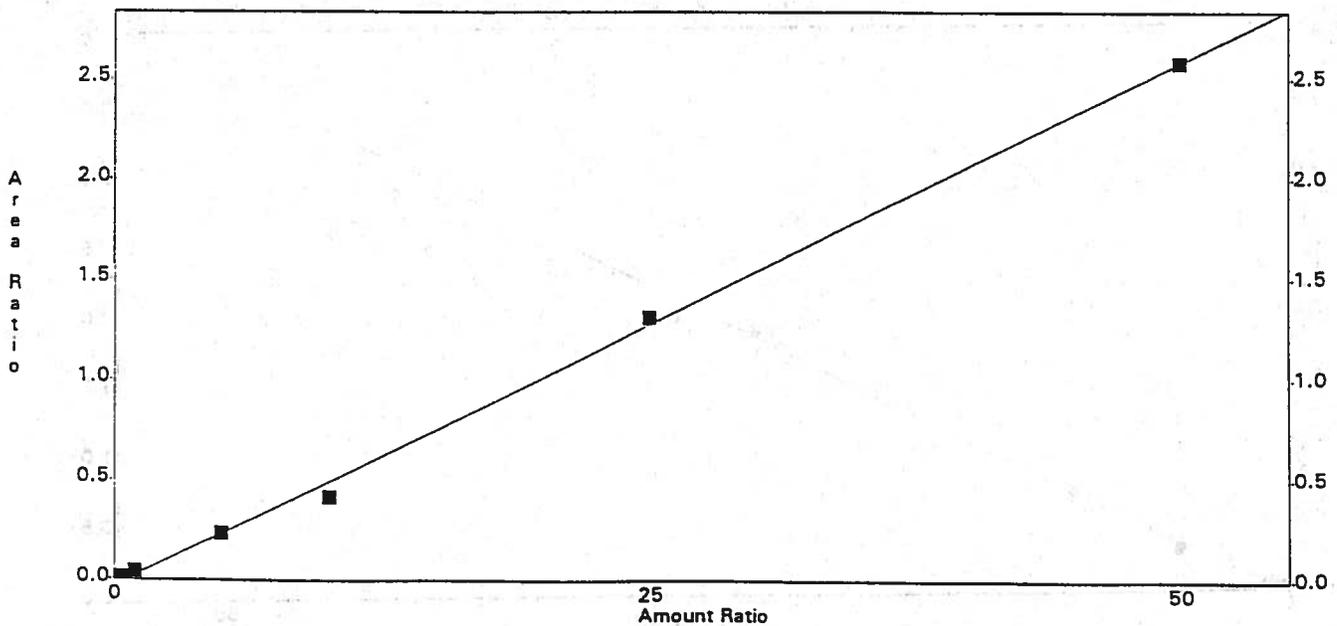
Calib Flag: Replace

Average RF: 0.0413177
 RF StdDev: 0.0100926
 RF ARSD: 24.4268

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 19.1157 x Area + 0.544406
 R² = 0.998498 ✓

Internal Standard Curve - Scaling: None



method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:38:55
 Channel : B
 Peak : CARBON TET

* - Replicate Not Used

Peak	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic 4RSD	Old Area Ratio
1	0.0096	0.4	0.02399	0.0096							0
2	0.0064	0.5	0.01274	0.0064							0
3	0.0317	1	0.03168	0.0317							0
4	0.2061	5	0.04123	0.2061							0
5	0.5653	10	0.05653	0.5653							0
6	1.6668	25	0.06667	1.6668							0
7	3.5657	50	0.07131	3.5657							0

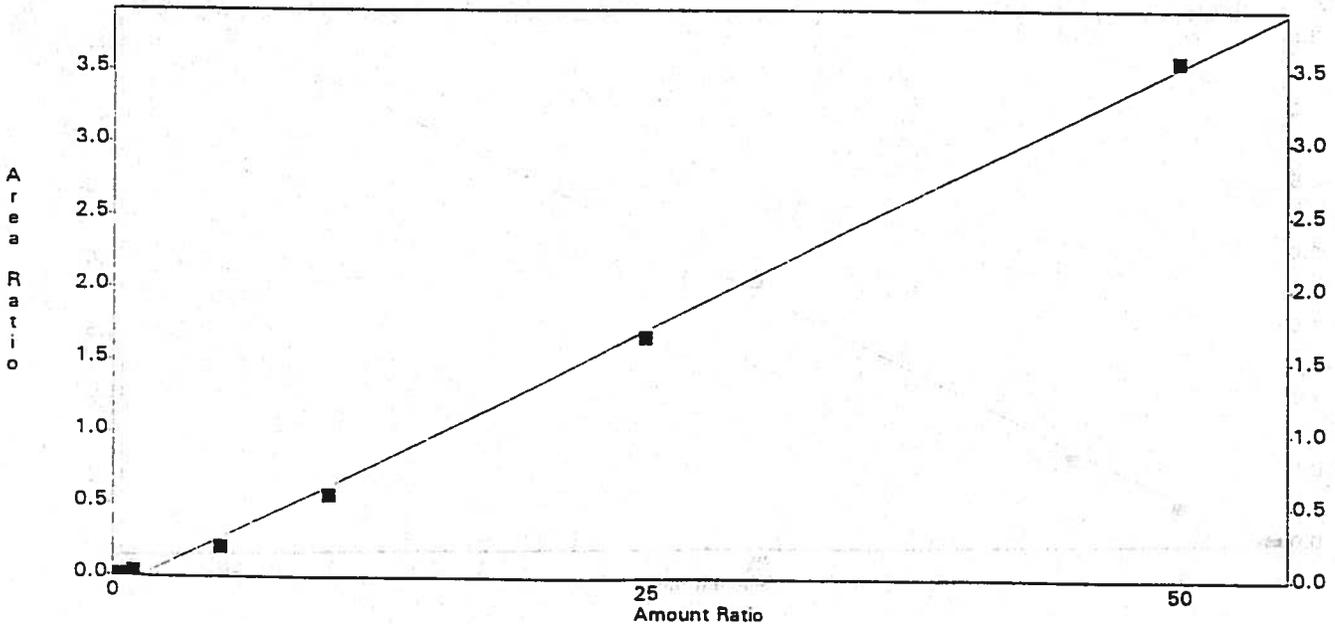
Control Flag: Replace

Average RF: 0.0485683
 RF StdDev: 0.019245
 RF RSD: 39.6247

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 13.7828 x Area + 1.34678
 R² = 0.95791

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:56
 Channel : B
 Peak : 1,2-DCA

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0164	0.4	0.04099	0.0164							0
2	0.0146	0.5	0.02919	0.0146*							0
3	0.0384	1	0.03837	0.0384							0
4	0.2633	5	0.05266	0.2633							0
5	0.5997	10	0.05997	0.5997							0
6	1.8431	25	0.07372	1.8431							0
7	3.5640	50	0.07128	3.5640							0

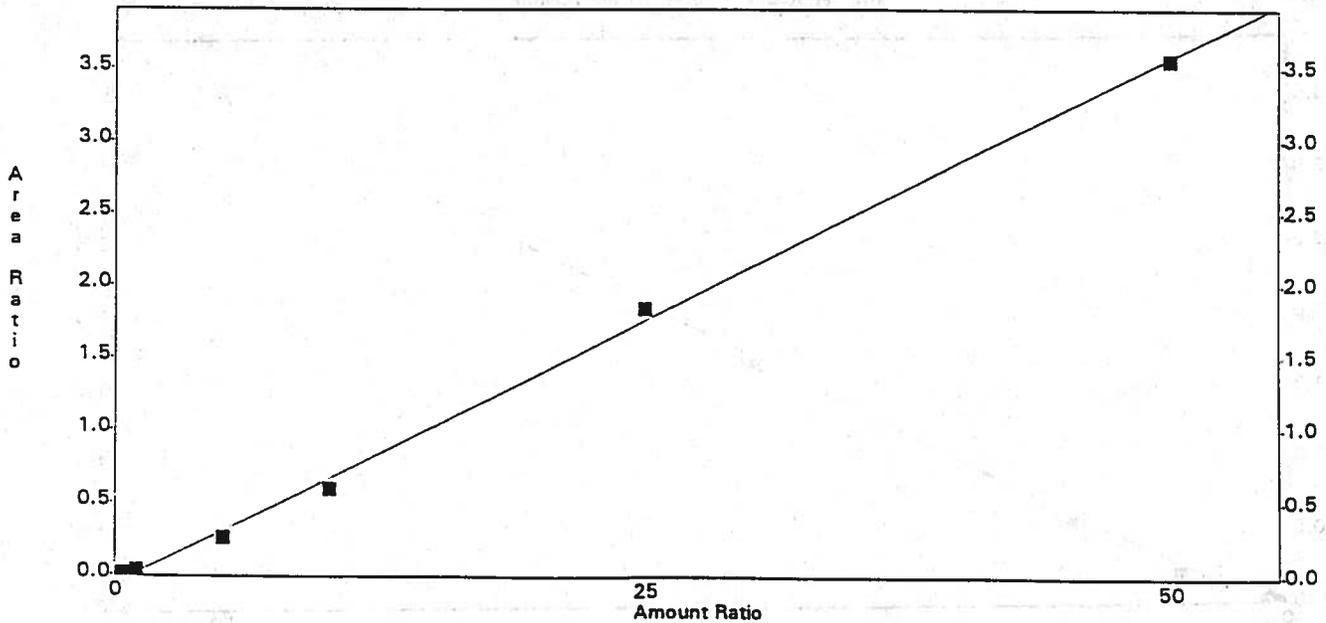
Calib Flag: Replace

Average RF: 0.0561664
 RF StdDev: 0.014903
 RF ARSD: 26.5336

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 13.7175 x Area + 0.773107
 R² = 0.998357 ✓

Internal Standard Curve - Scaling: None



ethod : c:\ezchrom\voatemp\lvoa0527.met
 Printed: May 29, 1996 16:38:56
 Channel : B
 Peak : 2-CL ETH VI ETH

* - Replicate Not Used

Peak	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic WRSD	Old Area Ratio
1	0.0066	0.4	0.01646	0.0066*							0
2	0.0048	0.5	0.009615	0.0048							0
3	0.0038	1	0.00376	0.0038*							0
4	0.0069	5	0.001381	0.0069							0
5	0.0407	10	0.004067	0.0407*							0
6	0.2801	25	0.0112	0.2801							0
7	0.5936	50	0.0187	0.5936							0

C b Flag: Replace

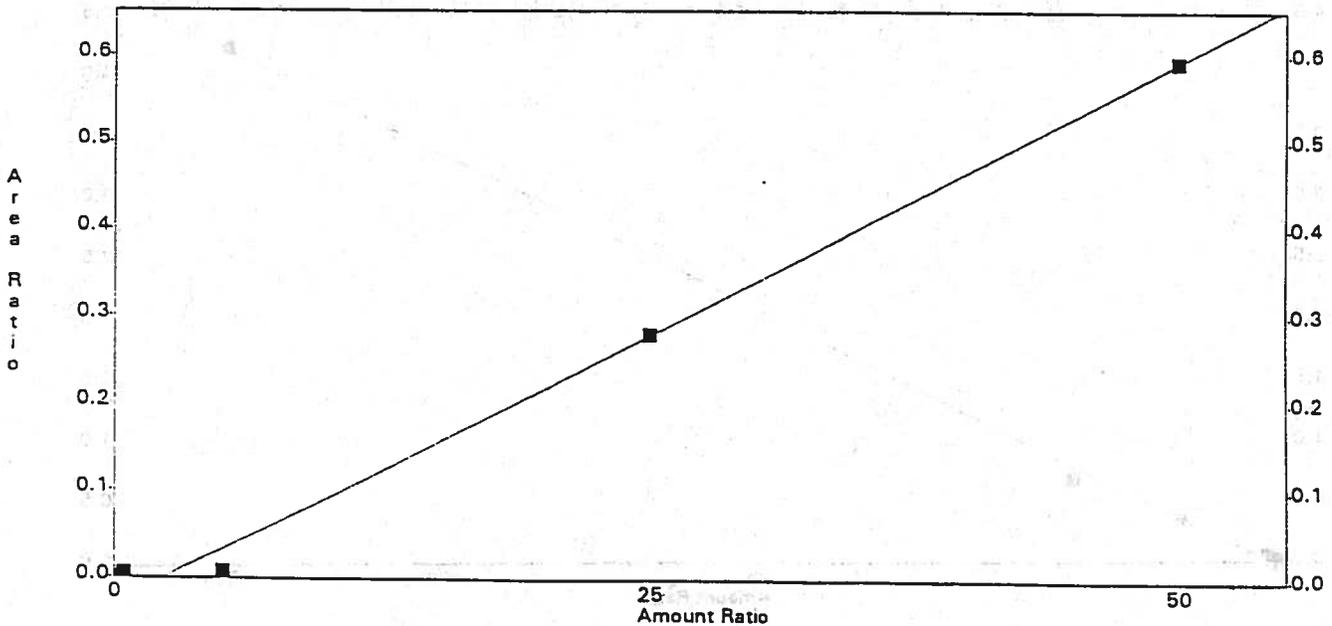
Average RF: 0.00851748
 RF StdDev: 0.00485094
 R WRSD: 56.9528

R Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

C Ratio Fit: Amount = -2.8683 x Area^2 + 82.1219 x Area + 2.25706
 R^2 = 0.993879 ✓

4 pt. curve OK, not an
 8021 compound
 AB31may96

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met * - Replicate Not Used
 Printed : May 29, 1996 16:38:56
 Channel : B
 Peak : TCE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0359	0.4	0.08986	0.0359*							0
2	0.0256	0.5	0.05125	0.0256							0
3	0.0571	1	0.05708	0.0571							0
4	0.3530	5	0.07059	0.3530							0
5	0.6901	10	0.06901	0.6901							0
6	1.9142	25	0.07657	1.9142*							0
7	4.2325	50	0.08465	4.2325							0

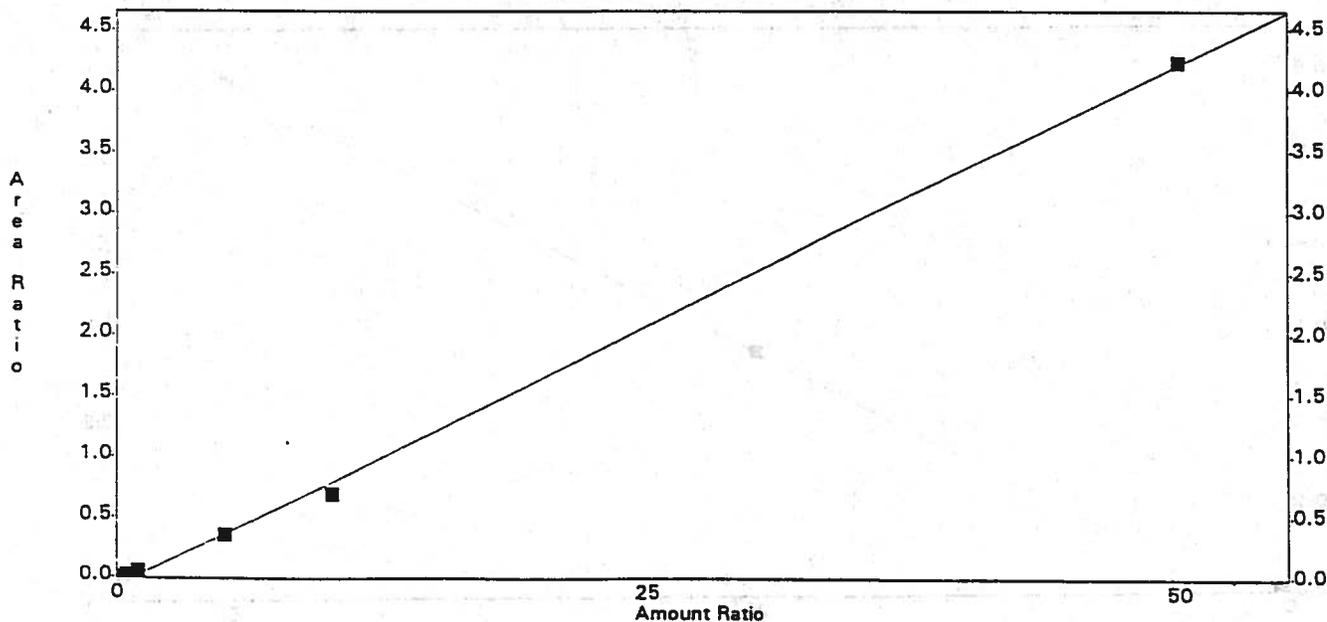
Calib Flag: Replace

Average RF: 0.0665163
 RF StdDev: 0.0129778
 RF %RSD: 19.5108

RF Definition: Area / Amount
 Weighting Method: None
 Fat Through Zero: No

Linear Fit: Amount = 11.6695 x Area + 0.794389
 R² = 0.998829 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:57
 Channel : B
 Peak : 1,2-DCPA

* - Replicate Not Used

Rep	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0208	0.4	0.05209	0.0208							0
2	0.0151	0.5	0.03011	0.0151							0
3	0.0431	1	0.04308	0.0431							0
4	0.2715	5	0.05431	0.2715							0
5	0.5004	10	0.05004	0.5004							0
6	1.5710	25	0.06284	1.5710							0
7	2.9501	50	0.059	2.9501							0

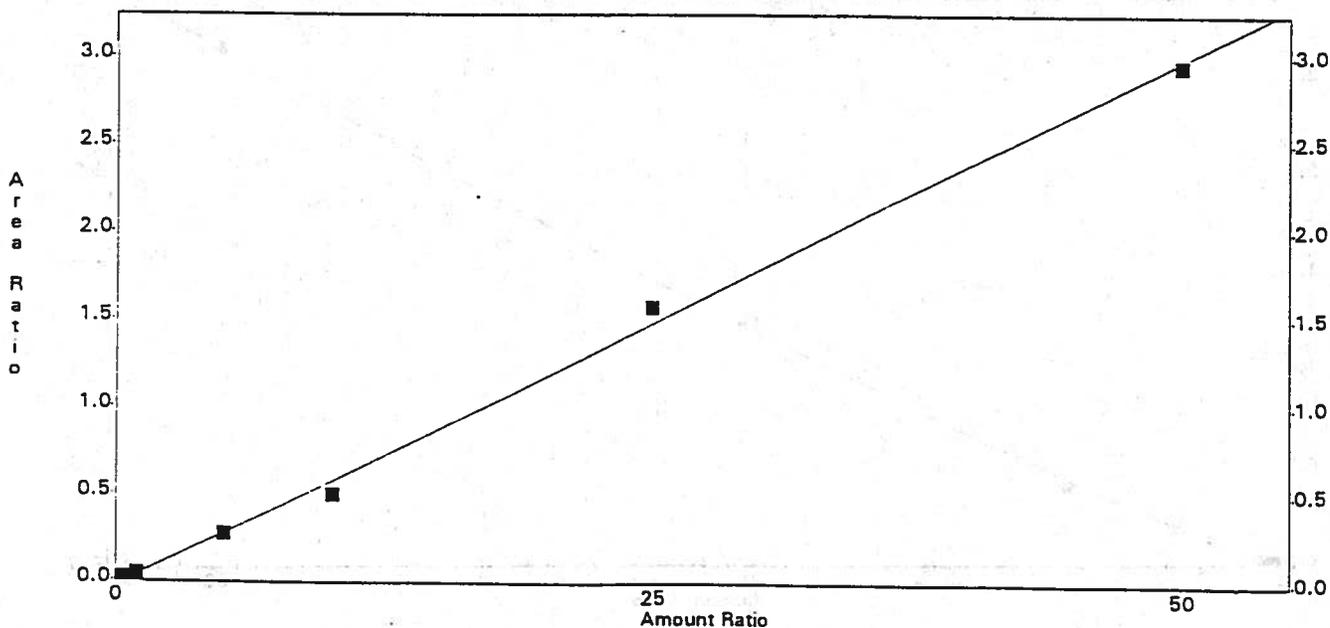
Flag: Replace

Average RF: 0.0535602
 RF StdDev: 0.0069385
 %RSD: 12.9546

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 16.6185 x/Area + 0.395798
 R² = 0.997635 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:38:57

Channel : B

Peak : BRDICLMETHANE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0139	0.4	0.03466	0.0139							0
2	0.0049	0.5	0.009759	0.0049*							0
3	0.0160	1	0.01601	0.0160							0
4	0.1894	5	0.03788	0.1894							0
5	0.4003	10	0.04003	0.4003							0
6	1.2330	25	0.04932	1.2330							0
7	2.6415	50	0.05283	2.6415							0

Calib Flag: Replace

Average RF: 0.0384555

RF StdDev: 0.0130043

RF %RSD: 33.8166

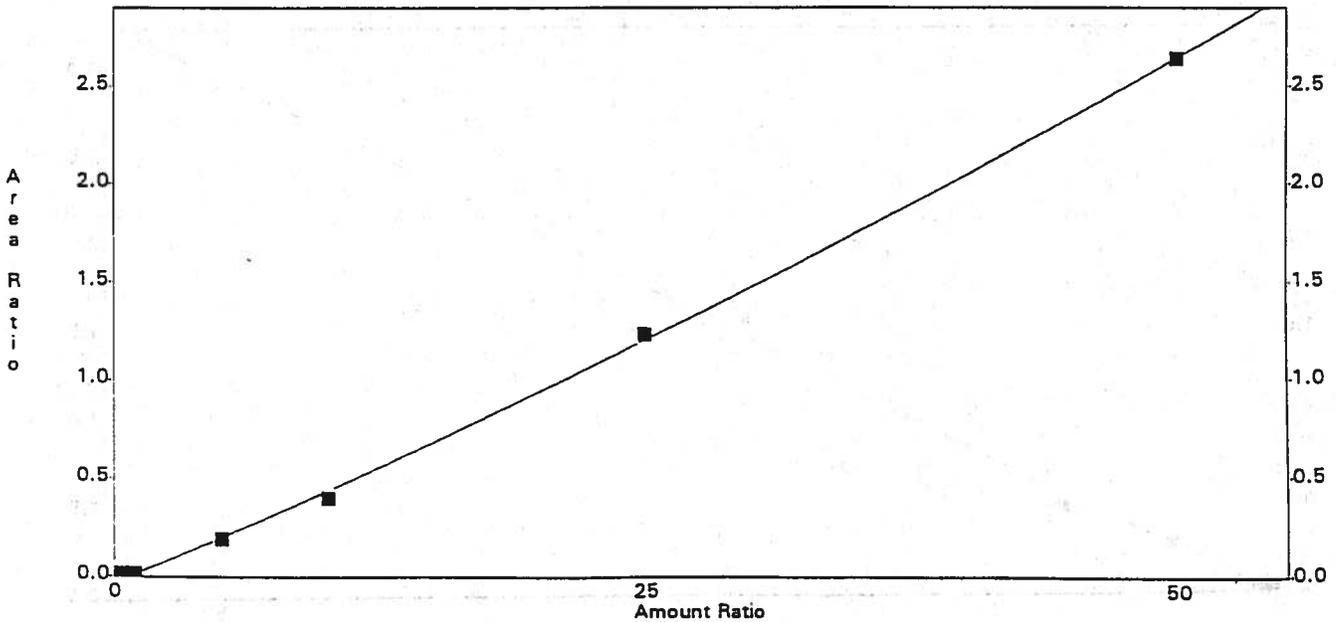
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Quadratic Fit: Amount = -1.04469 x Area² + 21.3757 x Area + 0.736392
R² = 0.999196 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:38:57
 Channel : B
 Peak : DIBROMOMETHANE

* - Replicate Not Used

Peak	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ABSD	Old Area Ratio
1	0.0030	0.4	0.007585	0.0030*							0
3	0.0015	1	0.001535	0.0015							0
4	0.1397	5	0.02793	0.1397							0
5	0.2623	10	0.02623	0.2623							0
6	1.0784	25	0.04313	1.0784							0
7	2.1406	50	0.04281	2.1406							0

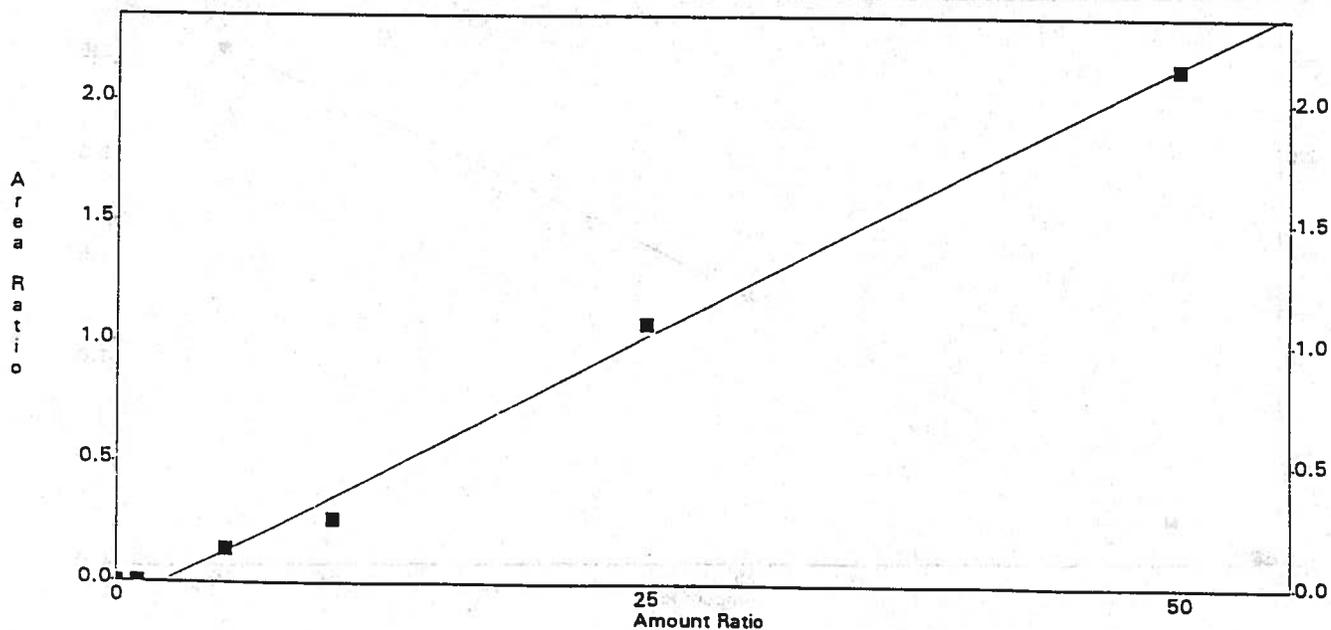
Flag: Replace

Page RF: 0.0283289
 RF StdDev: 0.0169668
 RF ABSD: 59.8923

Definition: Area / Amount
 Weighting Method: None
 Int Through Zero: No

Linear Fit: Amount = 22.245 x Area + 2.08345
 R² = 0.995702 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:57
 Channel : B
 Peak : CIS 1,3-DCPE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0123	0.4	0.03078	0.0123							0
2	0.0129	0.5	0.02577	0.0129							0
3	0.0401	1	0.04008	0.0401							0
4	0.2141	5	0.04282	0.2141							0
5	0.4482	10	0.04482	0.4482*							0
6	1.3232	25	0.05293	1.3232							0
7	2.5391	50	0.05078	2.5391							0

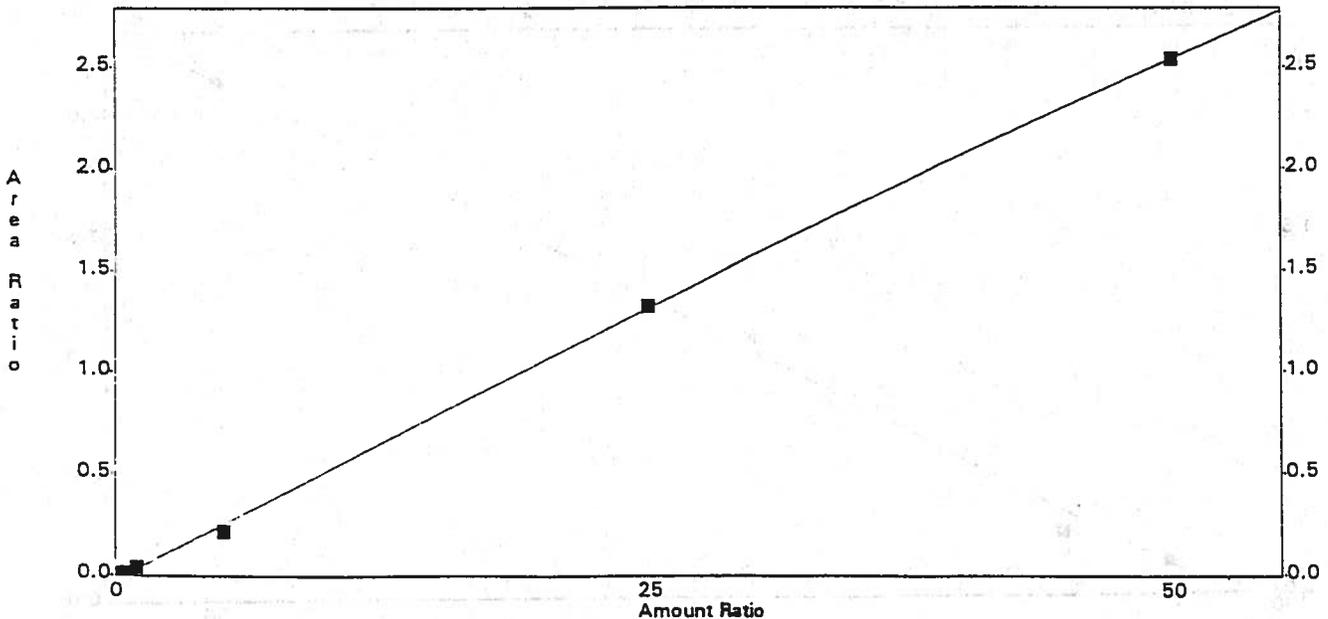
Calib Flag: Replace

Average RF: 0.0405273
 RF StdDev: 0.0107452
 RF ARSD: 26.5135

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = 0.642474 x Area² + 17.8709 x Area + 0.430813
 R² = 0.999674

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:58
 Channel : B
 Peak : TRANS 1,3-DCPE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0129	0.4	0.0222	0.0129							
2	0.0122	0.5	0.0243	0.0122							0
3	0.0294	1	0.0293	0.0294							0
4	0.1826	5	0.0365	0.1826							0
5	0.3762	10	0.0376	0.3762							0
6	1.0334	25	0.0413	1.0334							0
7	2.2999	50	0.046	2.2999							0

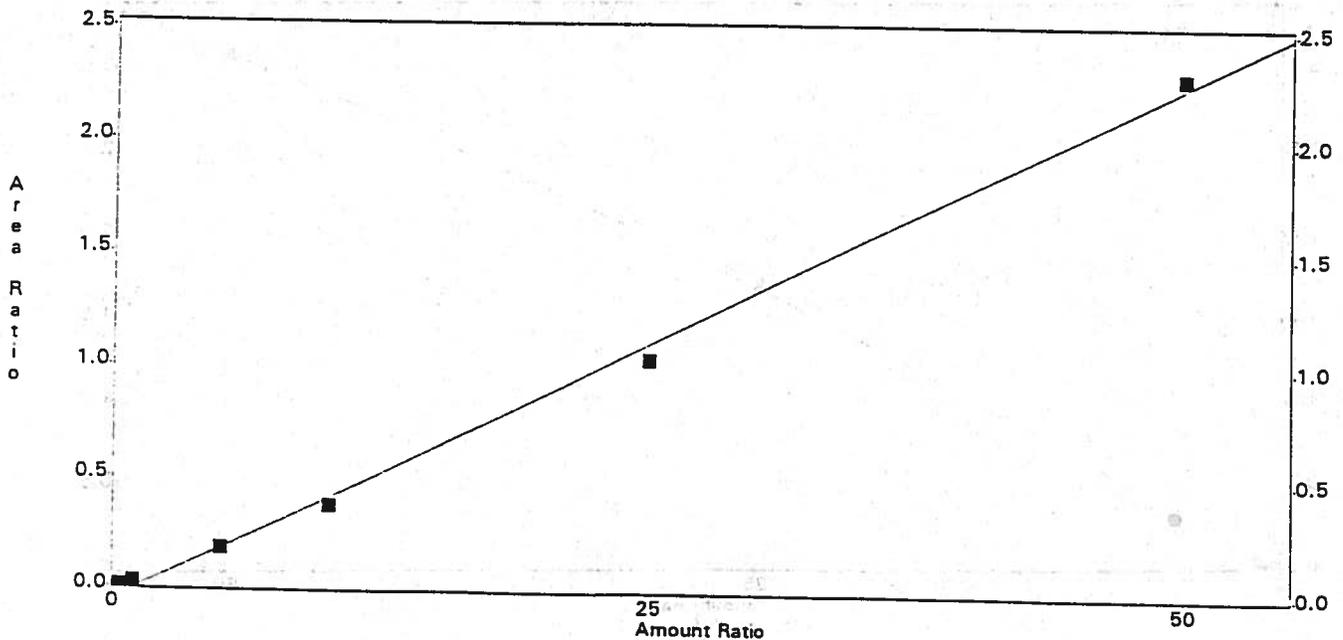
▸ Flag: Replace

Average RF: 0.0371772
 RF StdDev: 0.00602248
 RF %RSD: 16.1994

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 21.6534 x Area + 1.03452
 R² = 0.997215 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:58
 Channel : B
 Peak : 1,1,2-TCA

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0189	0.4	0.04736	0.0189							0
2	0.0157	0.5	0.03133	0.0157*							0
3	0.0430	1	0.04299	0.0430							0
4	0.3002	5	0.06005	0.3002							0
5	0.5786	10	0.05786	0.5786*							0
6	1.6985	25	0.06794	1.6985							0
7	3.0824	50	0.06165	3.0824							0

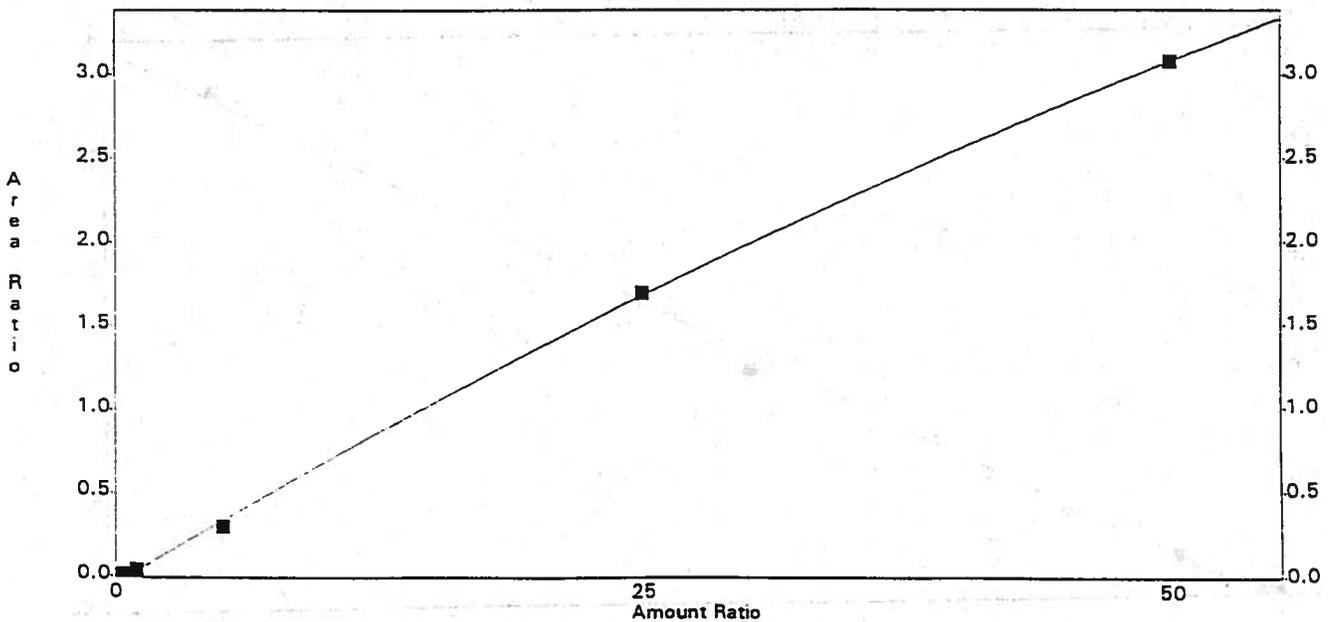
Calib Flag: Replace

Average RF: 0.0559974
 RF StdDev: 0.0104252
 RF %RSD: 18.6173

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = 1.09201 x Area² + 12.6678 x Area + 0.52428
 R² = 0.999722

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:38:59
 Channel : B
 Peak : 1,3 DCPA/PCE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0462	0.8	0.05779	0.0462							0
2	0.0509	1	0.05086	0.0509							0
3	0.0898	2	0.0449	0.0898							0
4	0.6236	10	0.06336	0.6236							0
5	1.2601	20	0.06301	1.2601							0
6	3.5182	50	0.07036	3.5182							0
7	5.9575	100	0.05958	5.9575							0

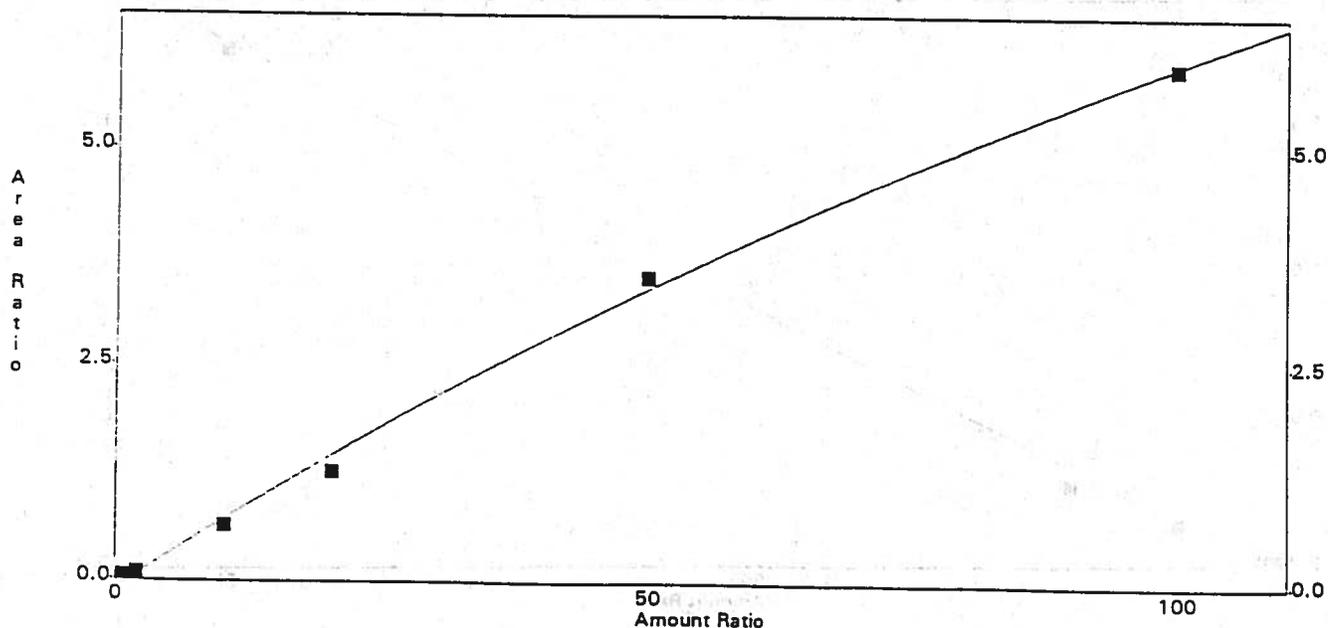
Ab Flag: Replace

Average RF: 0.0585507
 RF StdDev: 0.00846295
 RF ARSD: 14.4541

Definition: Area / Amount
 Integrating Method: None
 Flat Through Zero: No

Quadratic Fit: Amount = 0.810907 x Area² + 11.632 x Area + 1.27633
 R² = 0.998033 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:38:59
 Channel : B
 Peak : DIBRCLMETHANE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0111	0.4	0.02763	0.0111							0
2	0.0036	0.5	0.007294	0.0036							0
3	0.0173	1	0.01726	0.0173							0
4	0.1347	5	0.02694	0.1347							0
5	0.2719	10	0.02719	0.2719							0
6	0.9485	25	0.03794	0.9485							0
7	1.7545	50	0.03509	1.7545							0

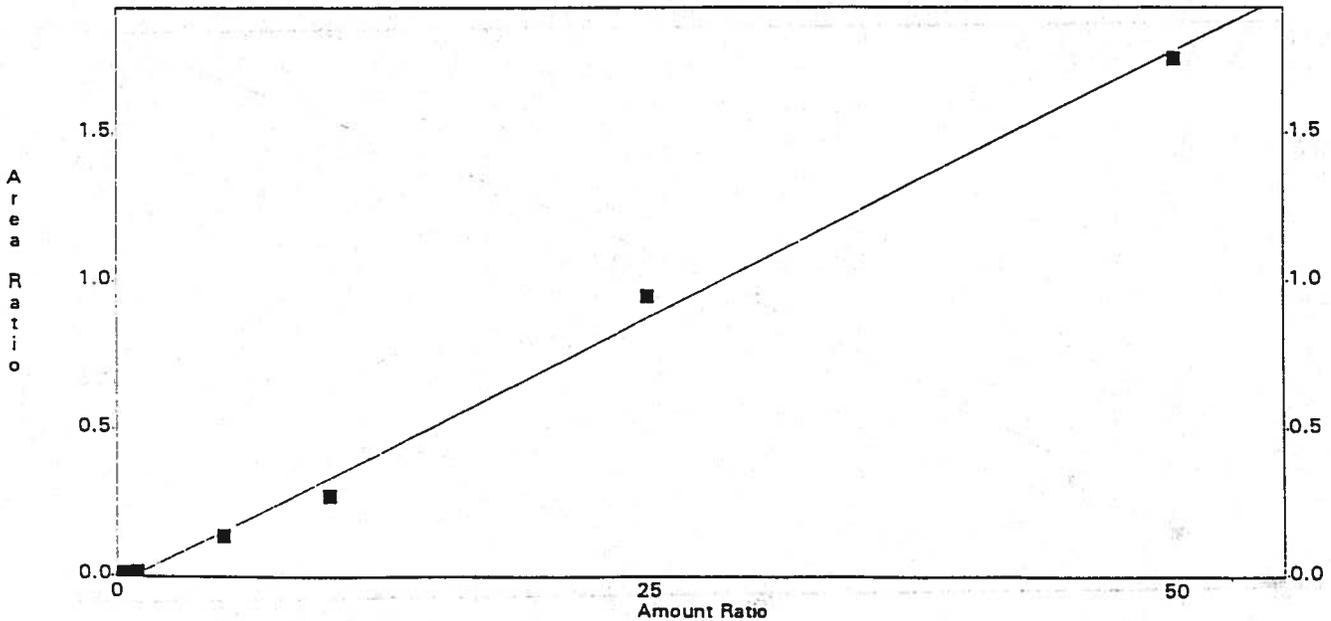
Calib Flag: Replace

Average RF: 0.028675
 RF StdDev: 0.00726035
 RF ARSD: 25.3194

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 27.6011 x Area + 0.798587
 R² = 0.995588 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:38:59
 Channel : B
 Peak : 1,2-DBEA (EDB)

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0045		0.4	0.02116	0.0045						0
2	0.0057		0.5	0.02143	0.0057						0
3	0.0098		1	0.009767	0.0098						0
4	0.0844		5	0.01689	0.0844						0
5	0.1953		10	0.01953	0.1953						0
6	0.7004		25	0.02901	0.7004						0
7	1.4157		50	0.02831	1.4157						0

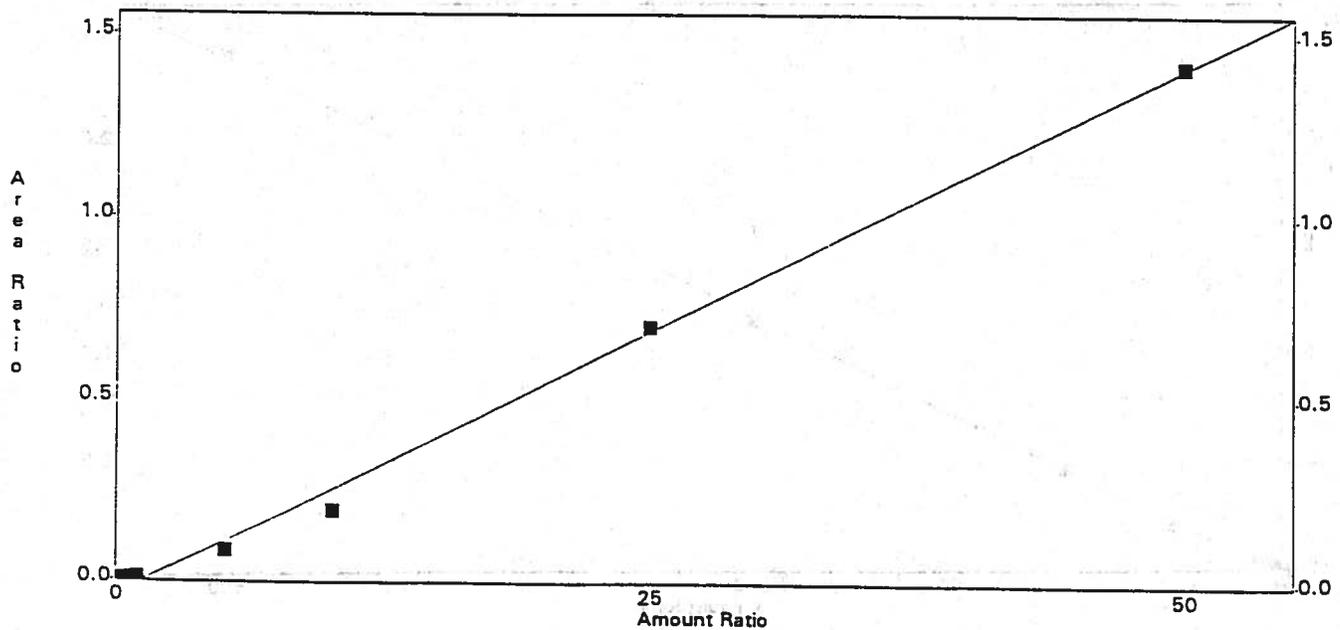
Lab Flag: Replace

Average RF: 0.0178711
 RF StdDev: 0.00783023
 RF ARSD: 43.815

Definition: Area / Amount
 Weighting Method: None
 Plot Through Zero: No

Linear Fit: Amount = 34.5553 x Area + 1.20339
 R² = 0.996492

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:39:00
 Channel : B
 Peak : 1CL4FBZ (SURR)

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0192	4	0.004808	0.0192							0
2	0.0164	5	0.003282	0.0164*							0
3	0.0453	10	0.004534	0.0453							0
4	0.2136	50	0.004272	0.2136							0
5	0.4717	100	0.004717	0.4717							0
6	1.1577	250	0.004631	1.1577							0
7	2.4005	500	0.004801	2.4005							0

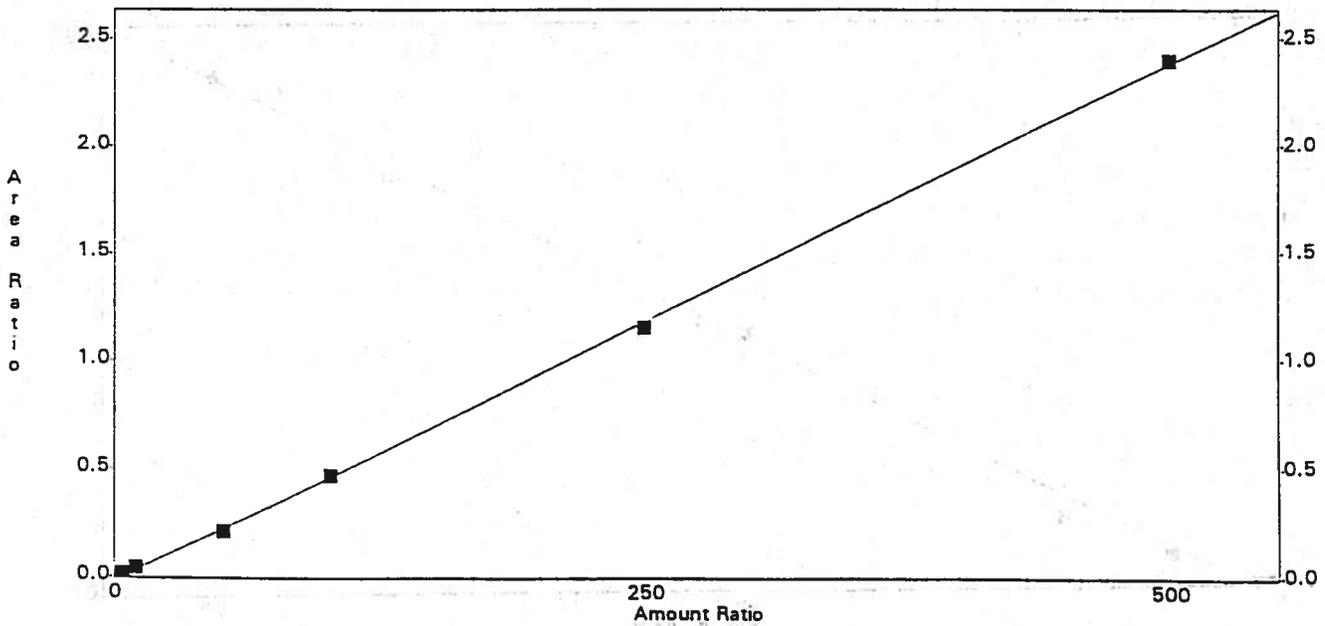
Calib Flag: Replace

Average RF: 0.00462703
 RF StdDev: 0.000202908
 RF ARSD: 4.38527

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 208.367 x Area + 2.72499
 R^2 = 0.999645 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

Printed : May 29, 1996 16:39:00

Channel : B

Peak : CHLOROBENZENE

* - Replicate Not Used

el	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic TRSD	Old Area Ratio
1	0.0076	0.4	0.01921	0.0076							0
2	0.0089	0.5	0.01786	0.0089							0
3	0.0174	1	0.01742	0.0174							0
4	0.1139	5	0.02279	0.1139							0
5	0.2358	10	0.02358	0.2358							0
6	0.6968	25	0.02787	0.6968							0
7	1.5680	50	0.03136	1.5680							0

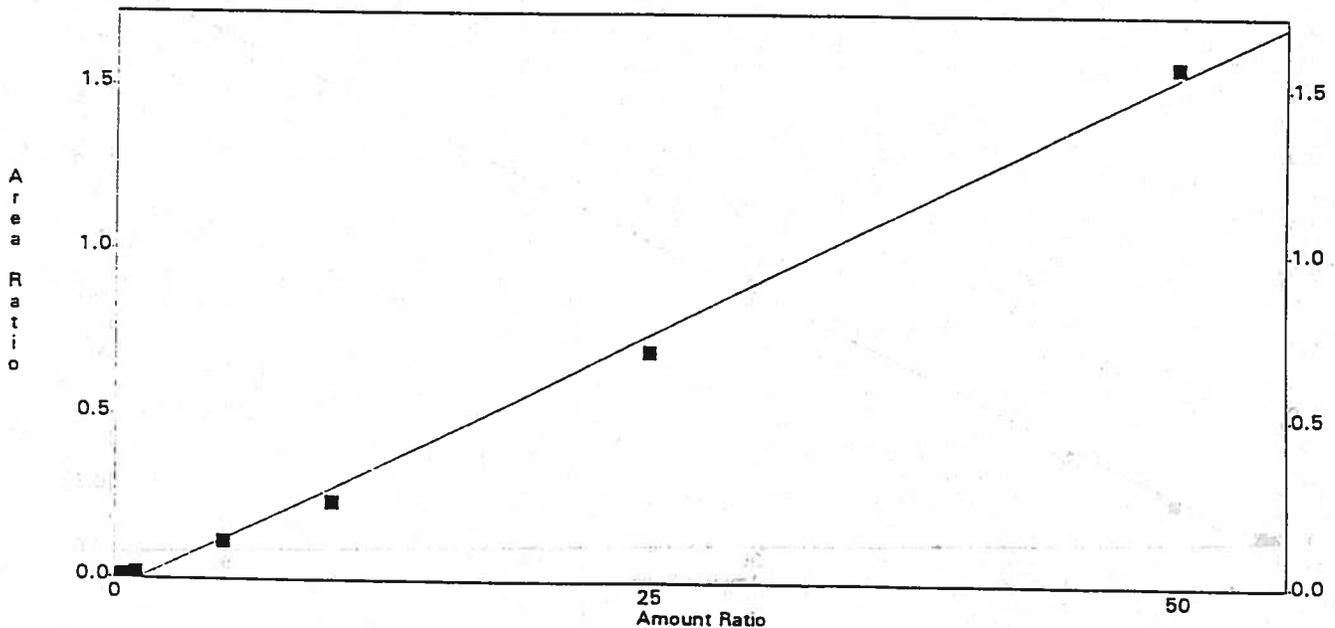
Ch Flag: Replace

Average RF: 0.0228555
RF StdDev: 0.00526786
i TRSD: 23.0485

Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 31.824 x Area + 1.08788
R² = 0.996035 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:39:00
 Channel : B
 Peak : 1,1,1,2-PCA

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0204	0.4	0.05112	0.0204							0
2	0.0216	0.5	0.0432	0.0216							0
3	0.0457	1	0.04572	0.0457							0
4	0.3120	5	0.06239	0.3120							0
5	0.6850	10	0.0685	0.6850							0
6	2.0759	25	0.08304	2.0759							0
7	4.0302	50	0.0806	4.0302							0

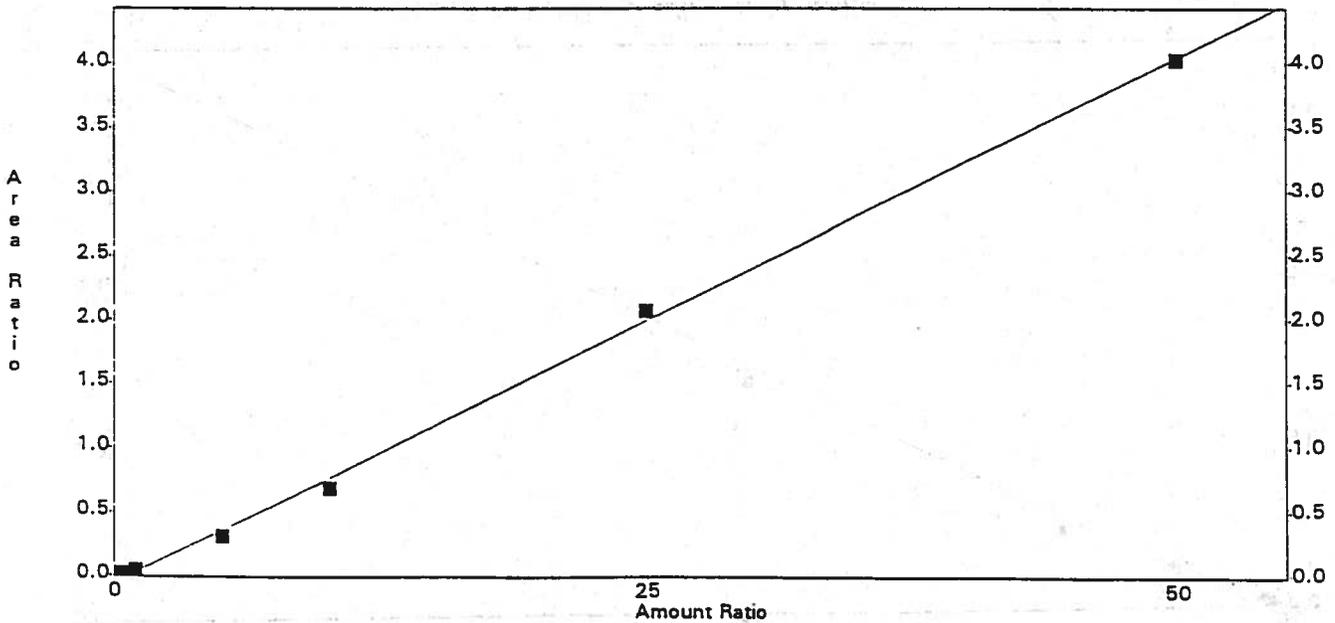
Calib Flag: Replace

Average RF: 0.062082
 RF StdDev: 0.0161652
 RF %RSD: 26.0385

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 12.1938 x Area + 0.602284
 R² = 0.998674 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met * - Replicate Not Used
 Printed : May 29, 1996 16:39:01
 Channel : E
 Peak : BROMOFORM

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic VRSD	Old Area Ratio
1	0.0019	0.4	0.004708	0.0019							0
2	0.0029	0.5	0.005889	0.0029							0
3	0.0108	1	0.01076	0.0108							0
4	0.0582	5	0.01165	0.0582							0
5	0.1301	10	0.01301	0.1301							0
6	0.5399	25	0.0215	0.5399							0
7	1.0901	50	0.0218	1.0901							0

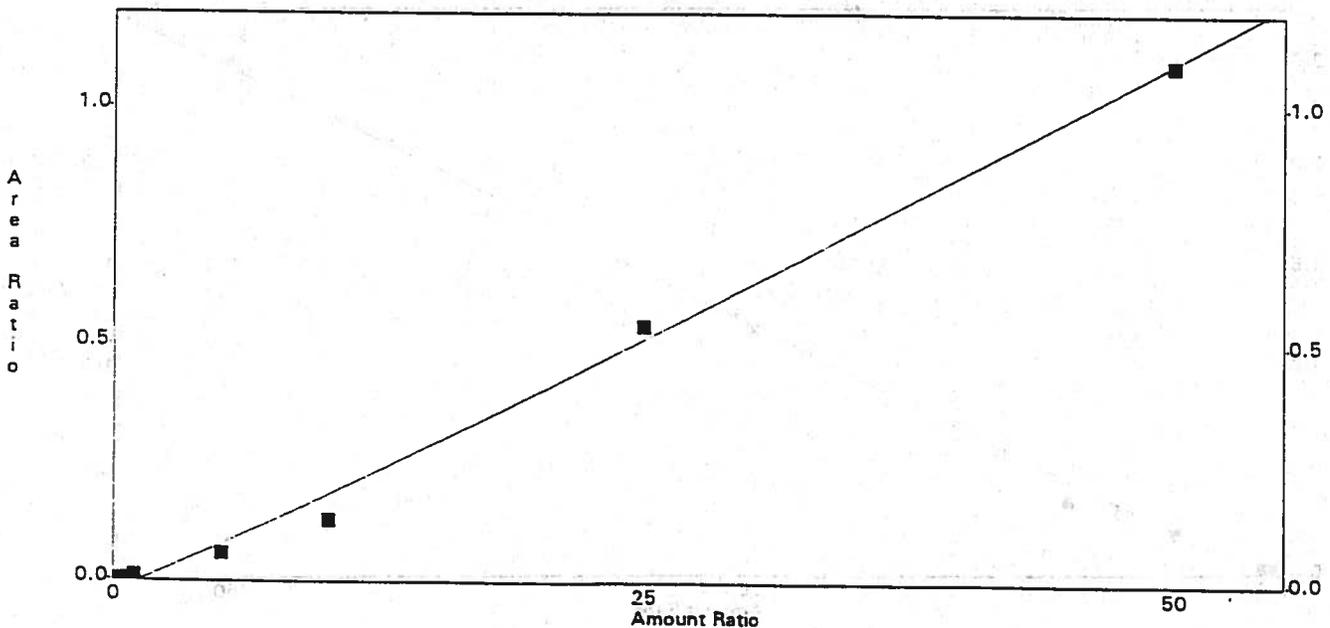
ib Flag: Replace

Page RF: 0.0127726
 RF StdDev: 0.00679689
 RF VRSD: 53.2147

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = -3.25124 x Area^2 + 48.0438 x Area + 1.24079
 R^2 = 0.99446 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:39:01
 Channel : B
 Peak : 1,1,2,2-PCA

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0104	0.4	0.02601	0.0104							0
2	0.0140	0.5	0.02803	0.0140							0
3	0.0333	1	0.03326	0.0333							0
4	0.1974	5	0.03947	0.1974							0
5	0.3619	10	0.03619	0.3619							0
6	1.1905	25	0.04762	1.1905							0
7	2.5162	50	0.05032	2.5162							0

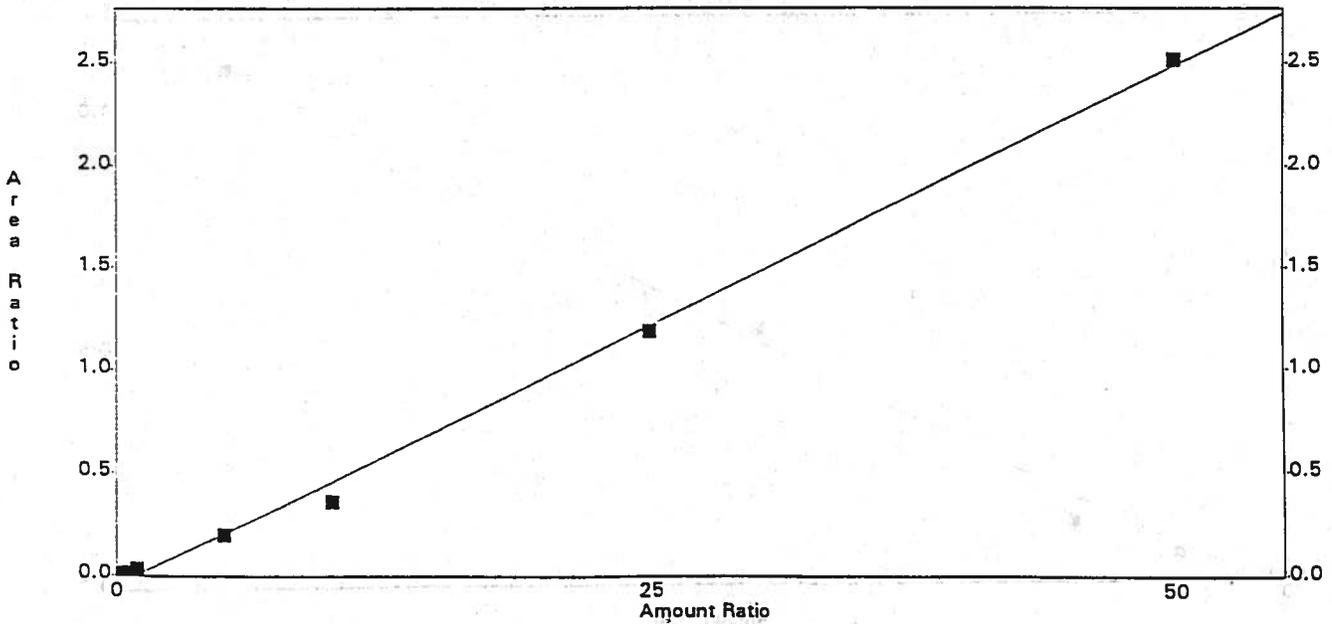
Calib Flag: Replace

Average RF: 0.037273
 RF StdDev: 0.00923538
 RF ARSD: 24.7777

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 19.7091 x Area + 0.954983
 R² = 0.997162 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:39:02
 Channel : B
 Peak : 1,2,3-TCPA

* - Replicate Not Used

Peak	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0100	0.4	0.02489	0.0100							0
2	0.0145	0.5	0.02906	0.0145							0
3	0.0209	1	0.02091	0.0209							0
4	0.1519	5	0.03037	0.1519							0
5	0.2587	10	0.02587	0.2587							0
6	0.8996	25	0.03599	0.8996							0
7	1.6605	50	0.03321	1.6605							0

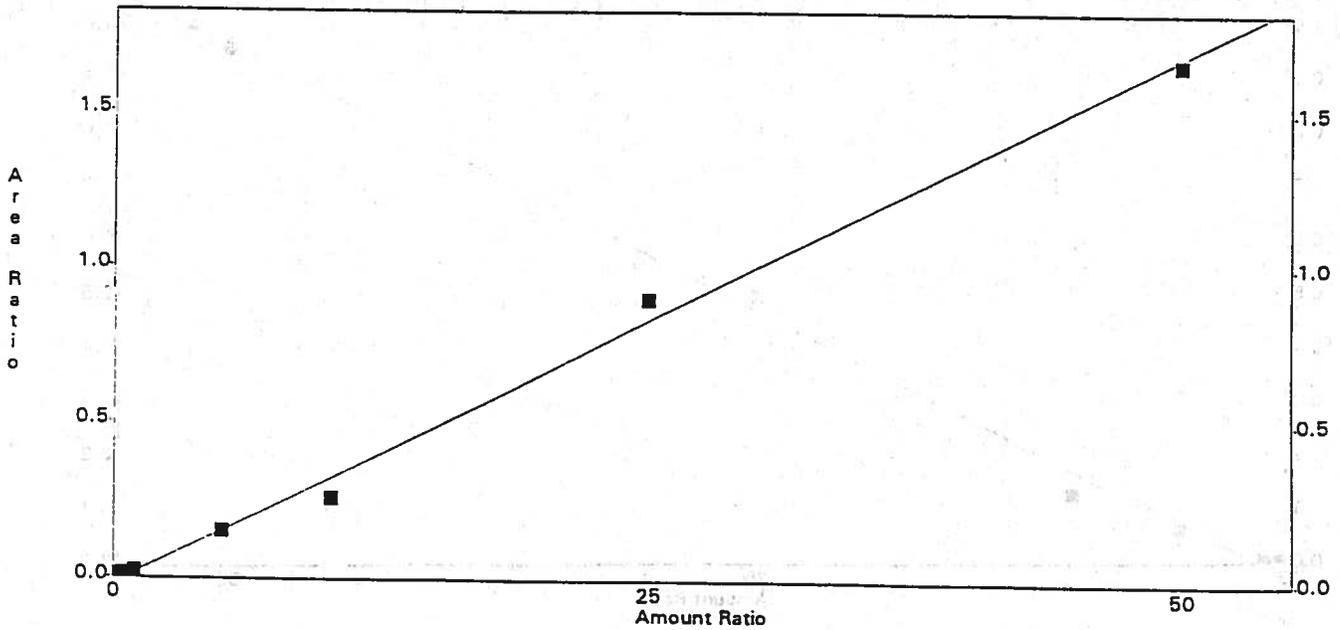
Ch Flag: Replace

Average RF: 0.028613
 RF StdDev: 0.00515599
 RF ARSD: 18.0198

F Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 29.3507 x Area + 0.465203
 R² = 0.995991 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:39:02
 Channel : B
 Peak : BROMOBENZENE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic 4RSD	Old Area Ratio
1	0.0055	0.4	0.01387	0.0055							0
2	0.0026	0.5	0.005253	0.0026*							0
3	0.0077	1	0.007698	0.0077							0
4	0.0652	5	0.01303	0.0652							0
5	0.1296	10	0.01296	0.1296							0
6	0.4980	25	0.01992	0.4980							0
7	0.9622	50	0.01924	0.9622							0

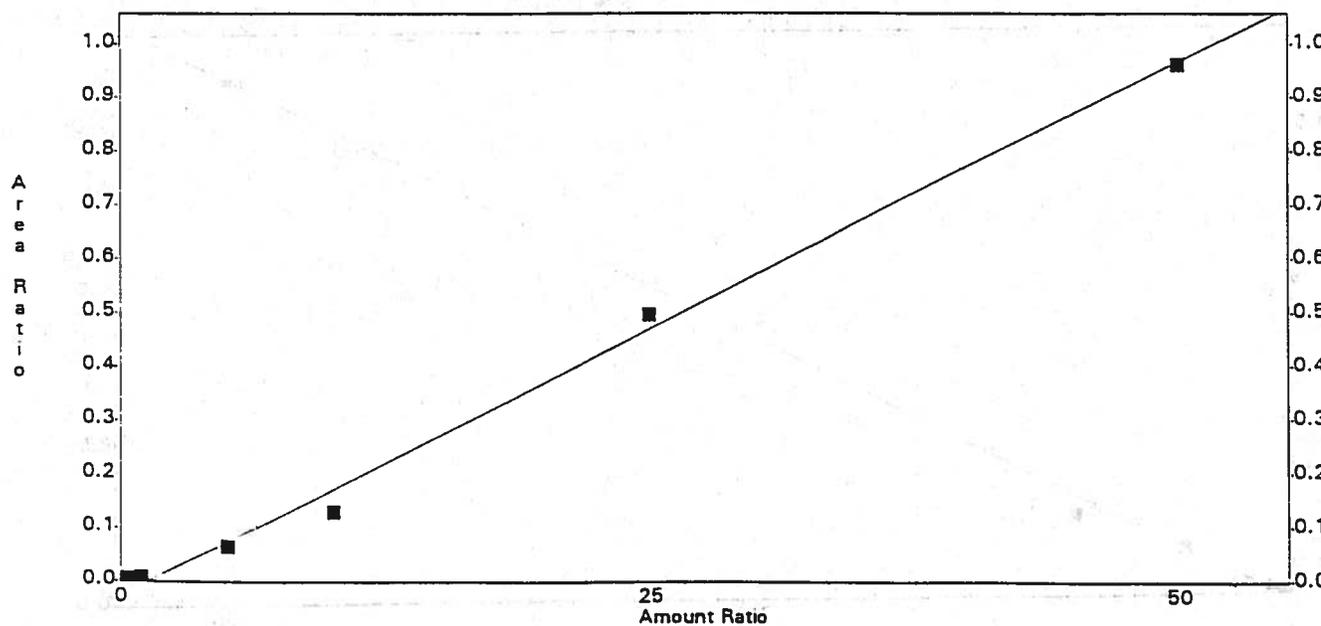
Calib Flag: Replace

Average RF: 0.0144553
 RF StdDev: 0.00453995
 RF 4RSD: 31.4067

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 50.303 x Area + 1.24689
 R² = 0.995326 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:39:02
 Channel : B
 Peak : 2-CL TOLUENE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic 4RSD	Old Area Ratio
1	0.0059	0.4	0.01463	0.0059							0
2	0.0073	0.5	0.0146	0.0073							0
3	0.0131	1	0.01315	0.0131							0
4	0.1062	5	0.02124	0.1062							0
5	0.2022	10	0.02022	0.2022							0
6	0.7232	25	0.02953	0.7232							0
7	1.3128	50	0.02626	1.3128							0

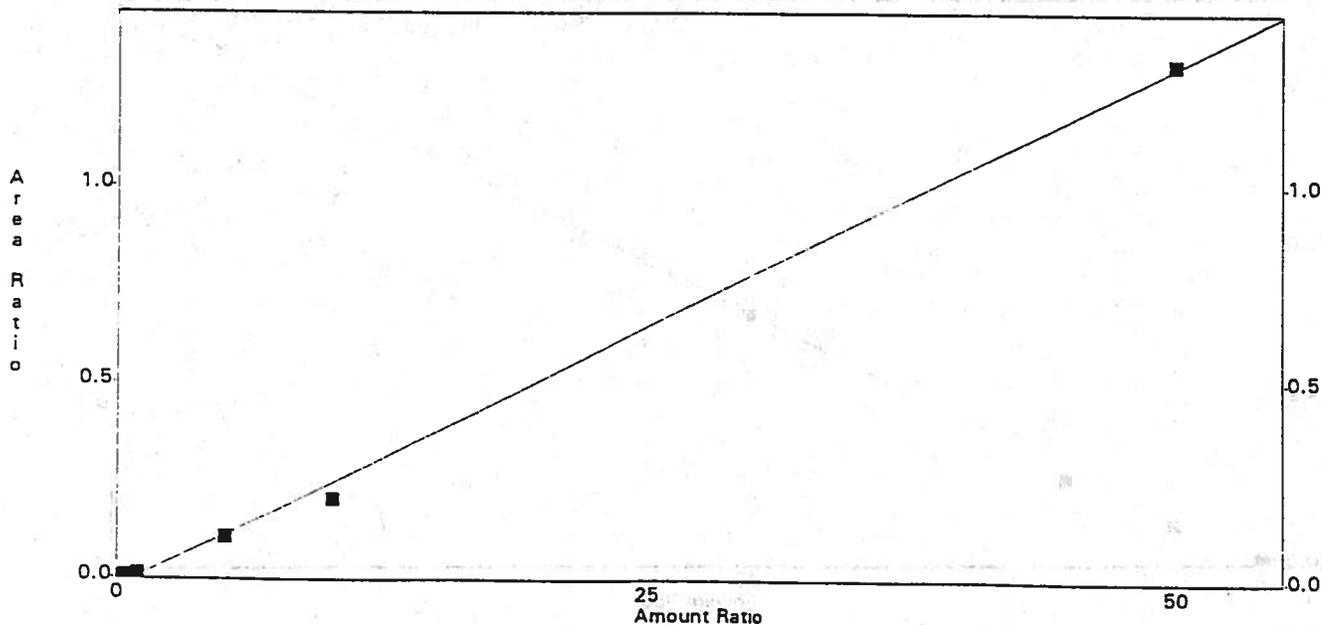
Ab Flag: Replace

Average RF: 0.0183504
 RF StDev: 0.0050852
 RF ARSD: 27.7116

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 37.6593 x Area + 0.808965
 R^2 = 0.998188

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:39:03
 Channel : B
 Peak : 4-CL TOLUENE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0087	0.4	0.0218	0.0087							0
2	0.0106	0.5	0.0212	0.0106							0
3	0.0176	1	0.01763	0.0176							0
4	0.1243	5	0.02486	0.1243							0
5	0.2687	10	0.02687	0.2687							0
6	0.7793	25	0.03117	0.7793							0
7	1.6160	50	0.03232	1.6160							0

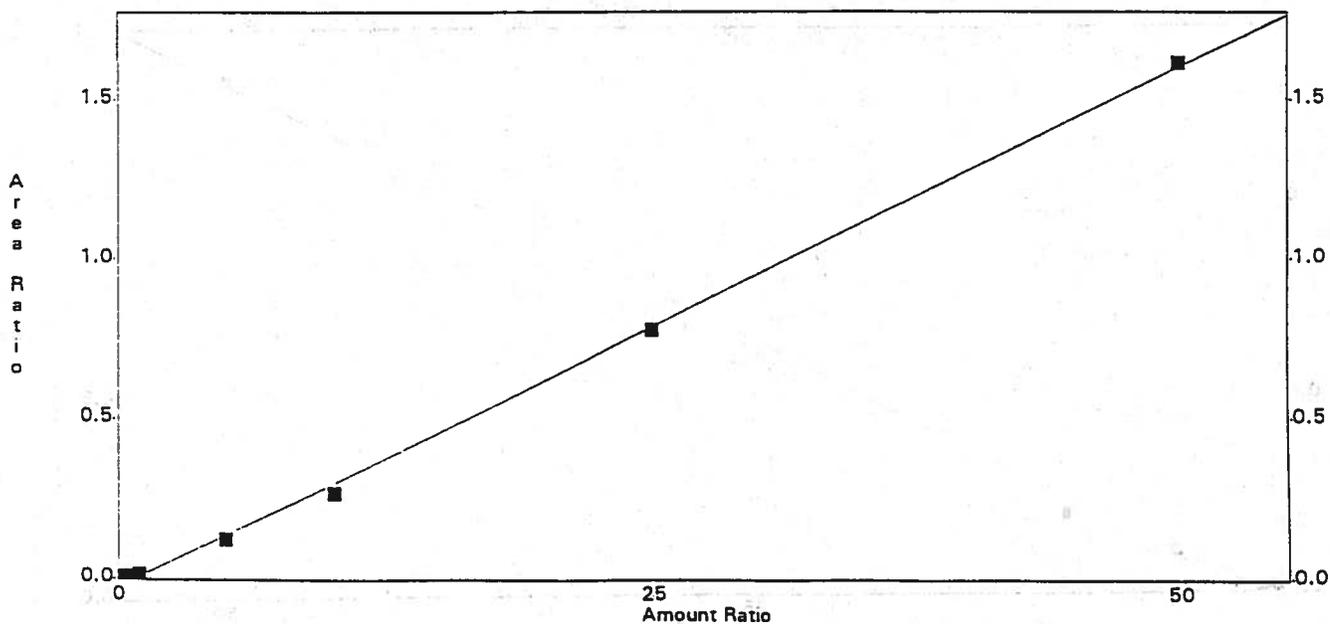
Calib Flag: Replace

Average RF: 0.025111
 RF StdDev: 0.00539662
 RF %RSD: 21.491

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 30.7045 x Area + 0.735958
 R² = 0.998914 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:39:03
 Channel : B
 Peak : 1,4-DCB

* - Replicate Not Used

Rep Area	Amount	RT	Rep Area 1	Rep Area 2	Rep Area 3	Rep Area 4	Rep Area 5	Replic STD	Replic 1ASD	Old Area
0.0106	0.4	0.02656	0.0106	0.0155	0.0286	0.0286	0.0286	0.0286	0.0286	0.0286
0.0155	0.5	0.03093	0.0155	0.0155	0.0155	0.0155	0.0155	0.0155	0.0155	0.0155
0.0286	1	0.02859	0.0286	0.0286	0.0286	0.0286	0.0286	0.0286	0.0286	0.0286
0.0219	5	0.04217	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219	0.0219
0.1955	10	0.03955	0.1955	0.1955	0.1955	0.1955	0.1955	0.1955	0.1955	0.1955
1.2719	25	0.05088	1.2719	1.2719	1.2719	1.2719	1.2719	1.2719	1.2719	1.2719
2.2915	50	0.04587	2.2915	2.2915	2.2915	2.2915	2.2915	2.2915	2.2915	2.2915

14 Flag: Replace

Scale RT: 0.017921

StdDev: 0.00929593

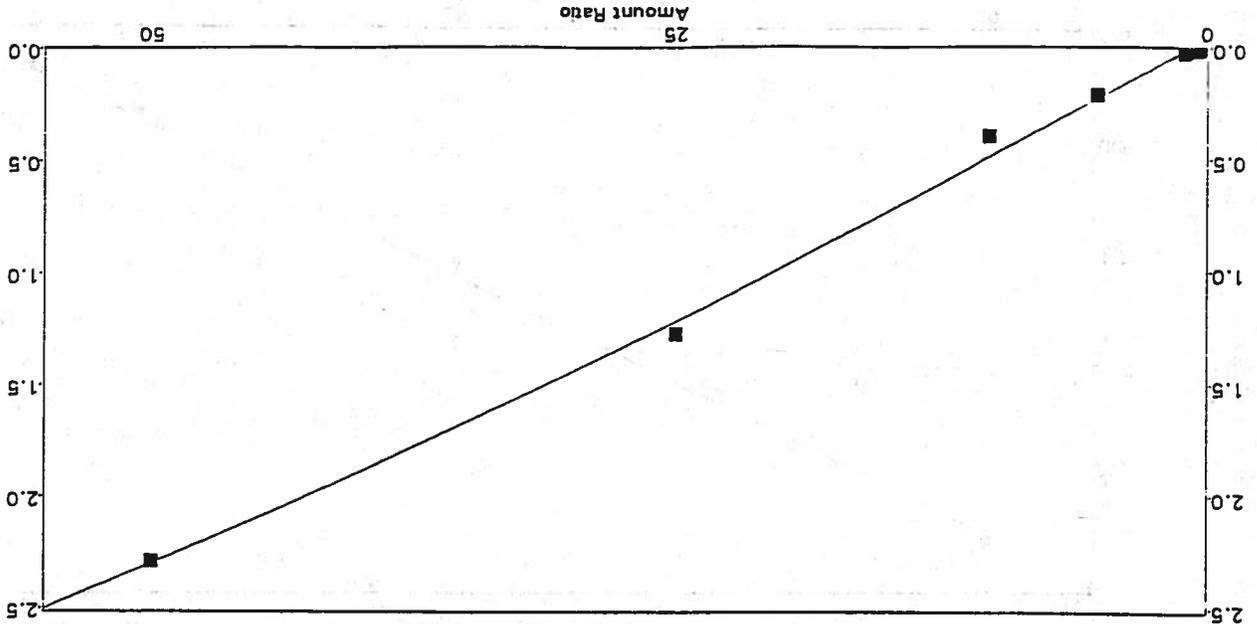
Area: 24.5787

Integration: Area / Amount

Integration Method: None

Through Zero: No

Graphic File: Amount = 1.05638 x Area^2 + 18.2397 x Area + 0.741325
 R^2 = 0.997325

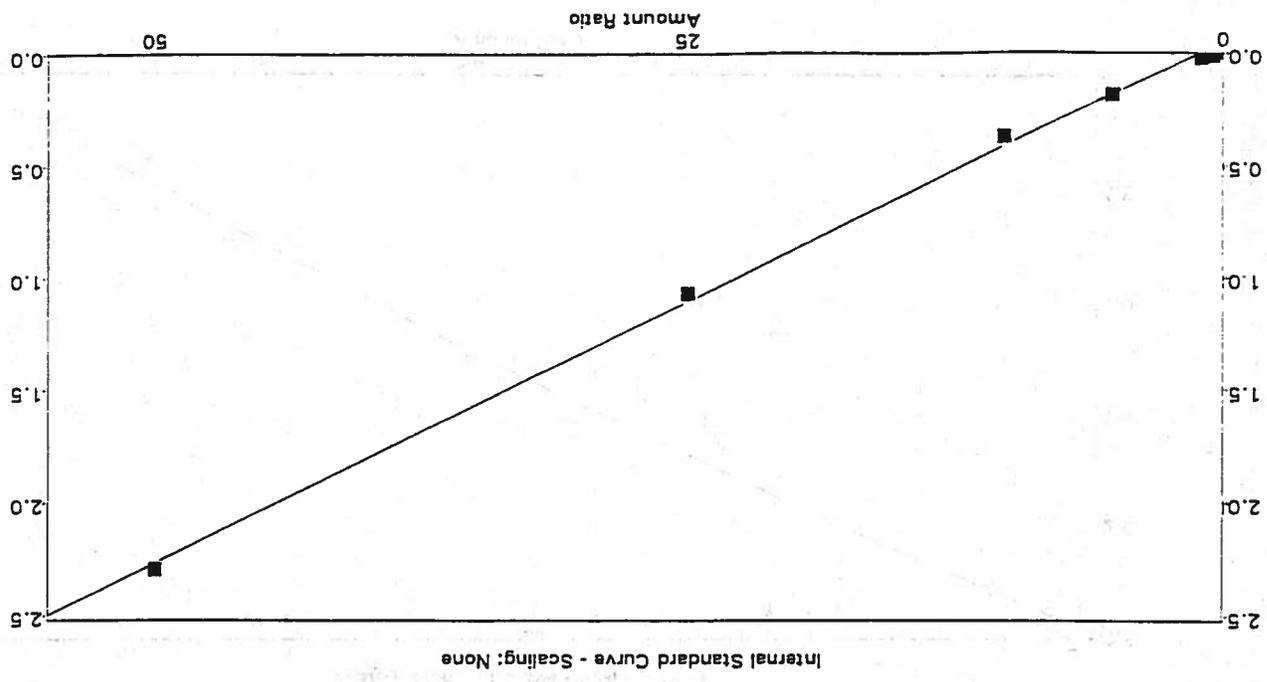


Internal Standard Curve - Scaling: None

Amount Ratio
 Rep Area 1 Rep Area 2 Rep Area 3 Rep Area 4 Rep Area 5 Replic 5M Replic 1M5D Old Area Ratio

	1	2	3	4	5	6	7
Amount	0.0129	0.0128	0.0226	0.1819	0.1696	1.0713	2.2963
Ratio	0.4	0.5	1	5	10	25	50
Rep Area 1	0.0129	0.02566	0.0226	0.1819	0.1696	1.0713	2.2963

Flag: Replicate
 Average RT: 0.025659
 StdDev: 0.00924312
 NMD: 26.3593
 Detection: Area / Amount
 Integration Method: None
 Through Date: No
 AT File: Amount = 21.564 x Area + 1.03739
 R² = 0.998397



Method : c:\ezchrom\voatemp\1voa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:39:03

Channel : B

Peak : 1,2-DCB

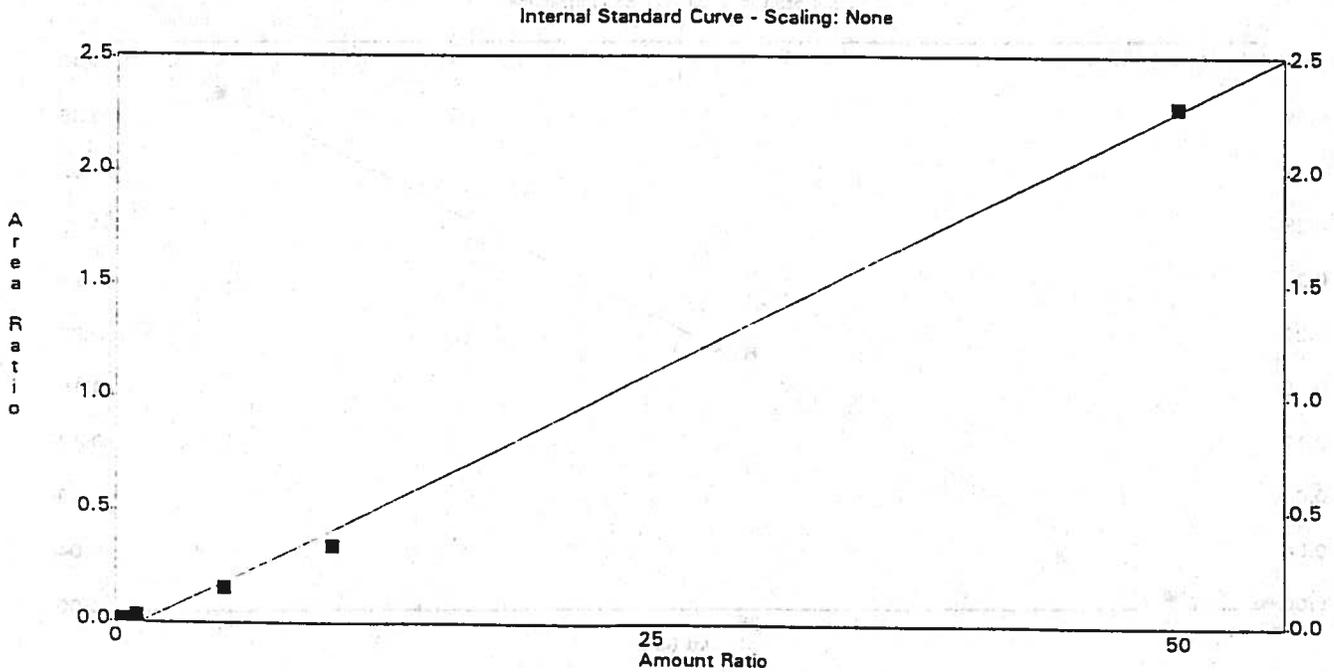
Peak	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0141	0.4	0.03518	0.0141							0
2	0.0122	0.5	0.02438	0.0122							0
3	0.0308	1	0.03082	0.0308							0
4	0.1526	5	0.03052	0.1526							0
5	0.3402	10	0.03402	0.3402							0
6	0.9607	25	0.03843	0.9607							0
7	2.2862	50	0.04572	2.2862							0

Replace Flag: Replace

Average RF: 0.0352581
RF StdDev: 0.00618841
%RSD: 17.5532

Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 21.4764 x Area + 1.15027
R² = 0.997399



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:39:04
 Channel : B
 Peak : 1,2-DBr-3-CPA

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
2	0.0030	0.5	0.005941	0.0030							0
3	0.0028	1	0.001766	0.0018*							0
4	0.0091	5	0.00183	0.0091							0
5	0.0392	10	0.003915	0.0392							0
6	0.1888	25	0.00755	0.1888							0
7	0.3803	50	0.007606	0.3803							0

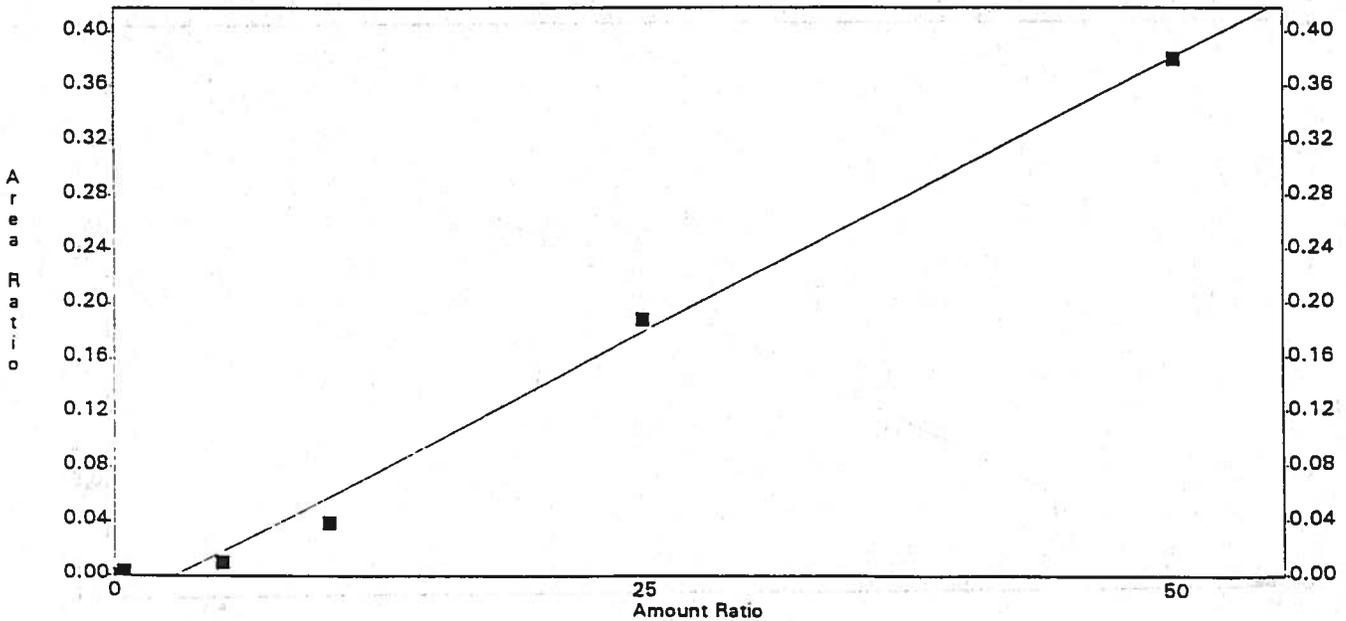
Calib Flag: Replace

Average RF: 0.00536899
 RF StdDev: 0.00248581
 RF %RSD: 46.2994

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 123.387 x Area + 2.79173
 $R^2 = 0.990624$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met
 Printed : May 29, 1996 16:39:04
 Channel : B
 Peak : 1,2,4-TCB

* - Replicate Not Used

Peak	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic ARSD	Old Area Ratio
1	0.0069	0.4	0.01714	0.0069*							0
2	0.0039	0.5	0.007732	0.0039							0
3	0.0043	1	0.004272	0.0043							0
4	0.1154	5	0.02308	0.1154							0
5	0.2475	10	0.02475	0.2475							0
6	0.3741	25	0.03896	0.3741*							0
7	1.8179	50	0.03636	1.8179							0

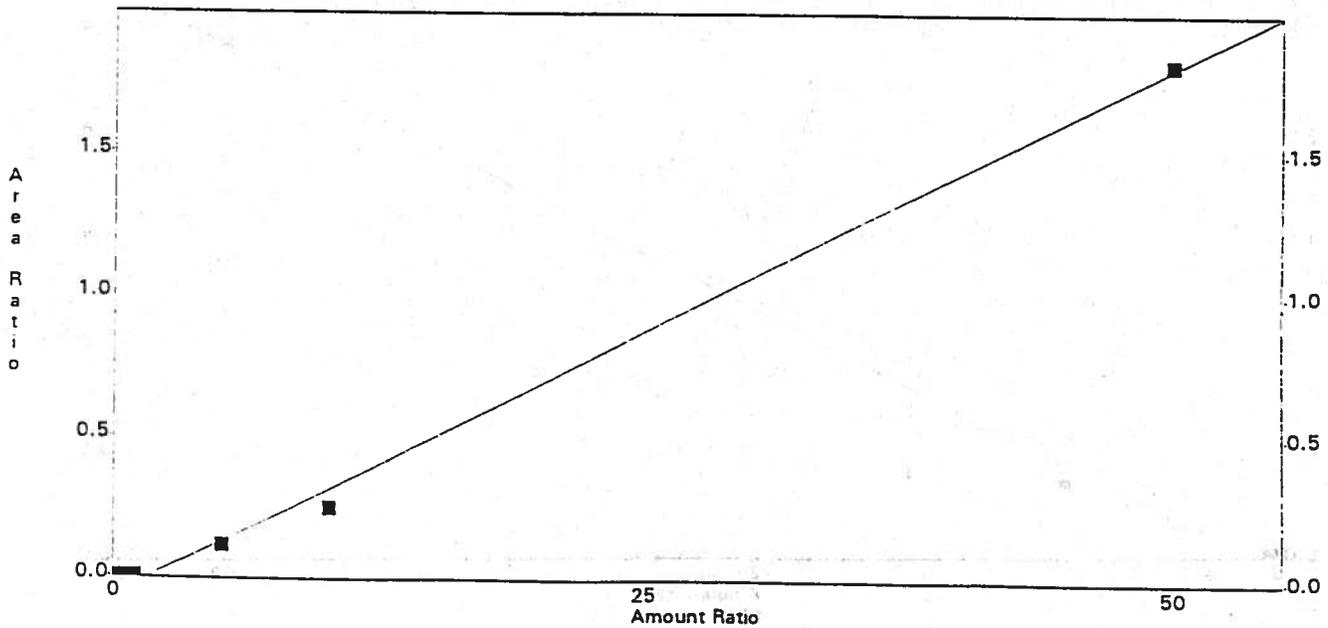
ab Flag: Replace

Average RF: 0.0192388
 RF StdDev: 0.011781
 ** ARSD: 68.4973

Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 26.7816 x Area + 1.57524
 $R^2 = 0.996974$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\lvoa0527.met

* - Replicate Not Used

Printed : May 29, 1996 16:39:04

Channel : B

Peak : HEXACL BUTADIENE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0150	0.4	0.03744	0.0150							0
2	0.0186	0.5	0.03728	0.0186							0
3	0.0127	1	0.01269	0.0127*							0
4	0.1728	5	0.03456	0.1728							0
5	0.3523	10	0.03523	0.3523							0
6	1.4025	25	0.0561	1.4025*							0
7	2.4626	50	0.04925	2.4626							0

Calib Flag: Replace

Average RF: 0.0387531

RF StdDev: 0.00600198

RF %RSD: 15.4877

RF Definition: Area / Amount

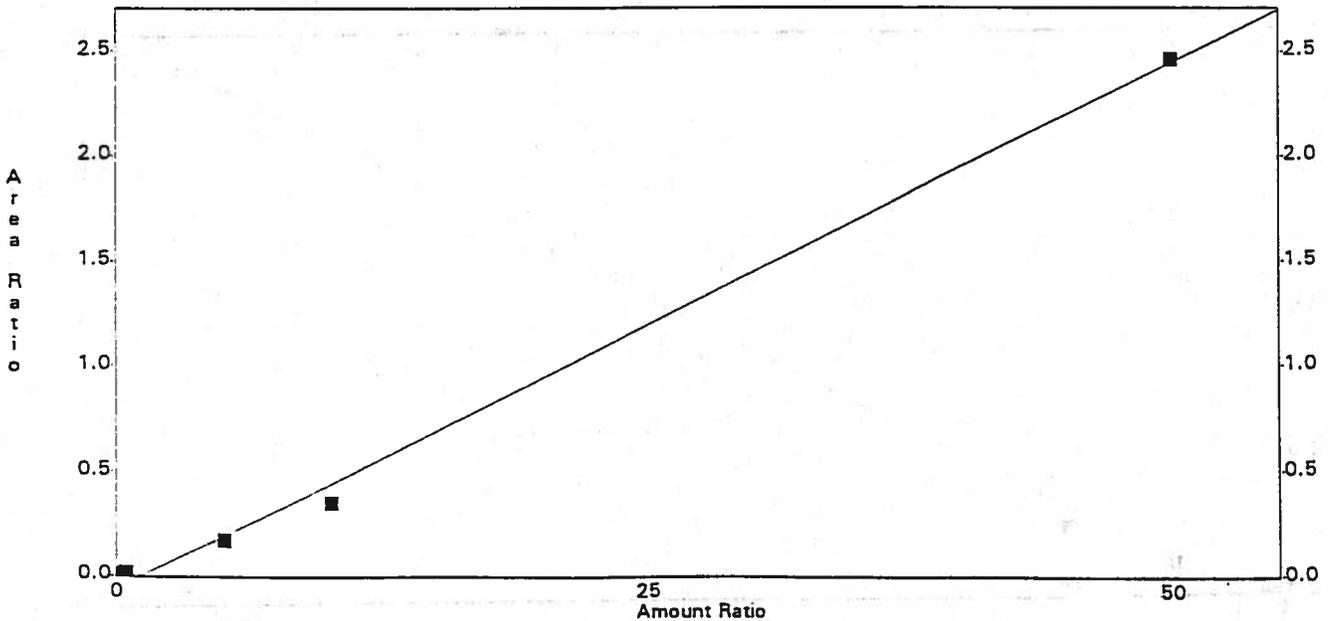
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 19.9649 x Area + 1.11581

R² = 0.996758 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\voatemp\1voa0527.met
 Printed : May 29, 1996 16:39:05
 Channel : B
 Peak : 1,2,3-TCB

* - Replicate Not Used

Peak	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic 4MSD	Old Area Ratio
1	0.0085	0.4	0.0213	0.0085							0
2	0.0036	0.5	0.007122	0.0036*							0
3	0.0037	1	0.003651	0.0037*							0
4	0.0705	5	0.0141	0.0705							0
5	0.2224	10	0.02224	0.2224							0
6	0.8546	25	0.03418	0.8546							0
7	1.6781	50	0.03356	1.6781							0

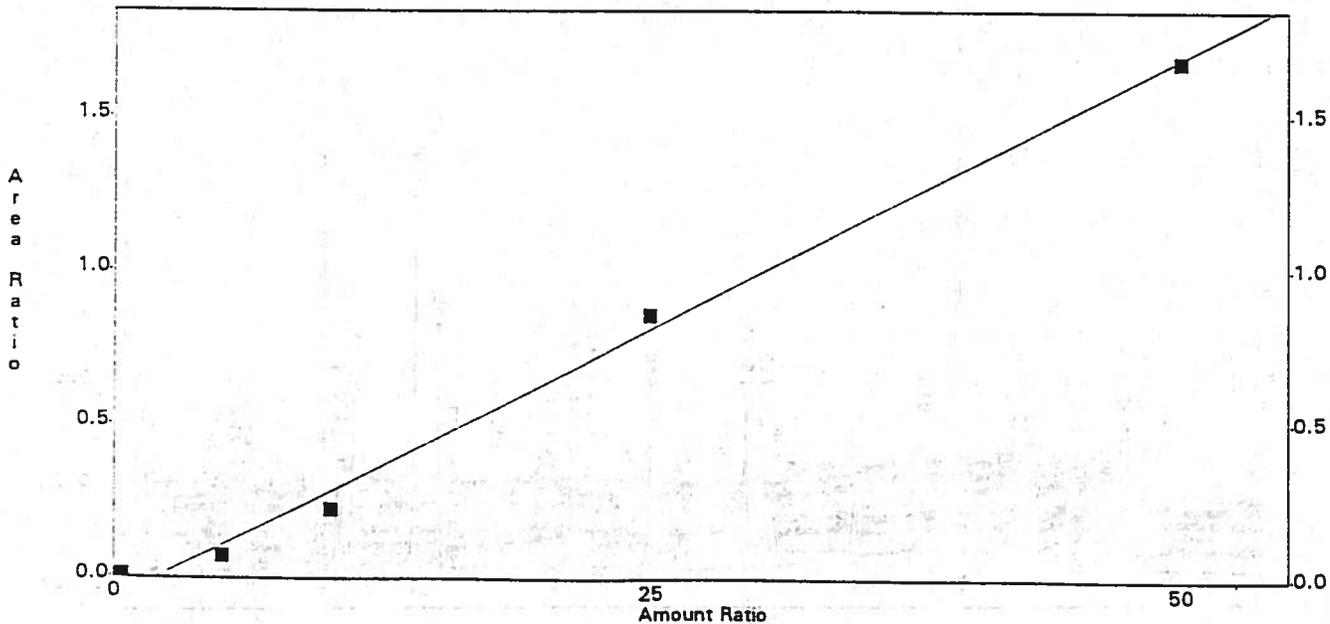
Lab Flag: Replace

Average RF: 0.0250777
 RF StdDev: 0.00862745
 F 4MSD: 34.4029

F Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 28.3839 x Area + 1.99149
 R² = 0.994456

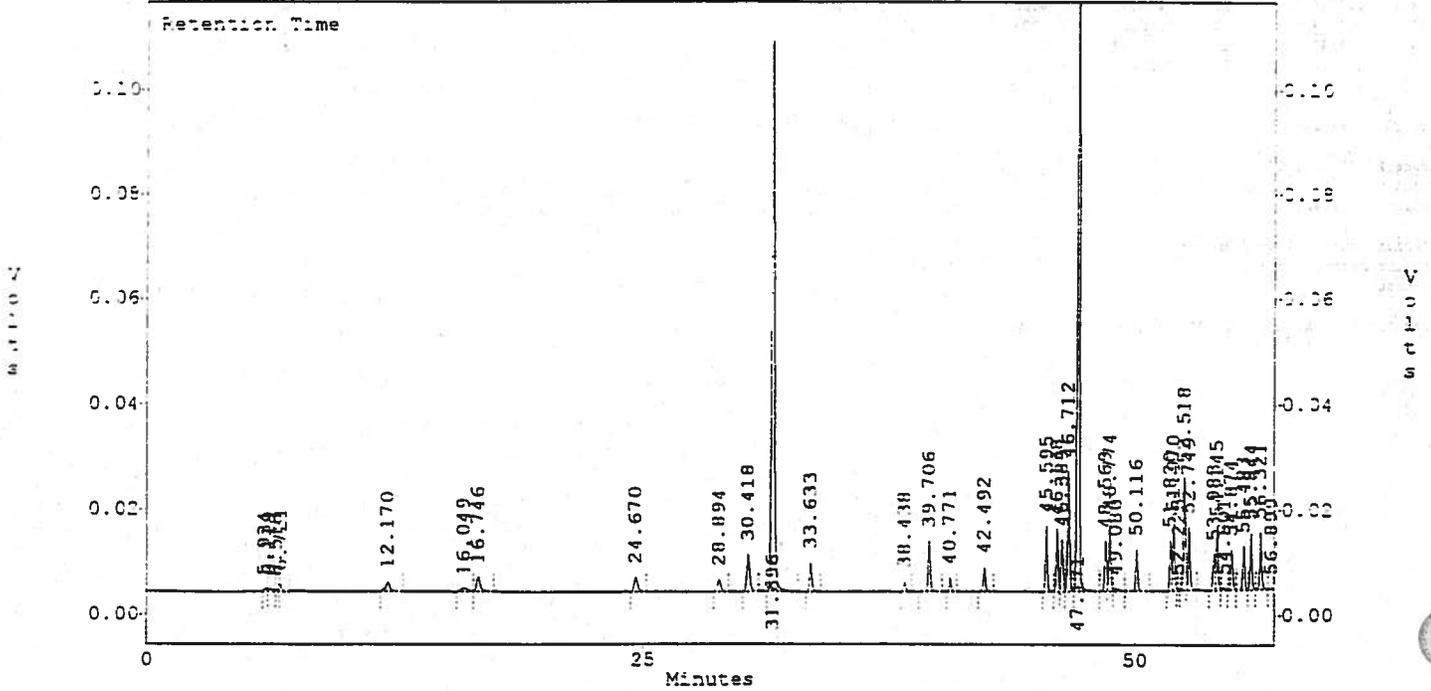
Internal Standard Curve - Scaling: None



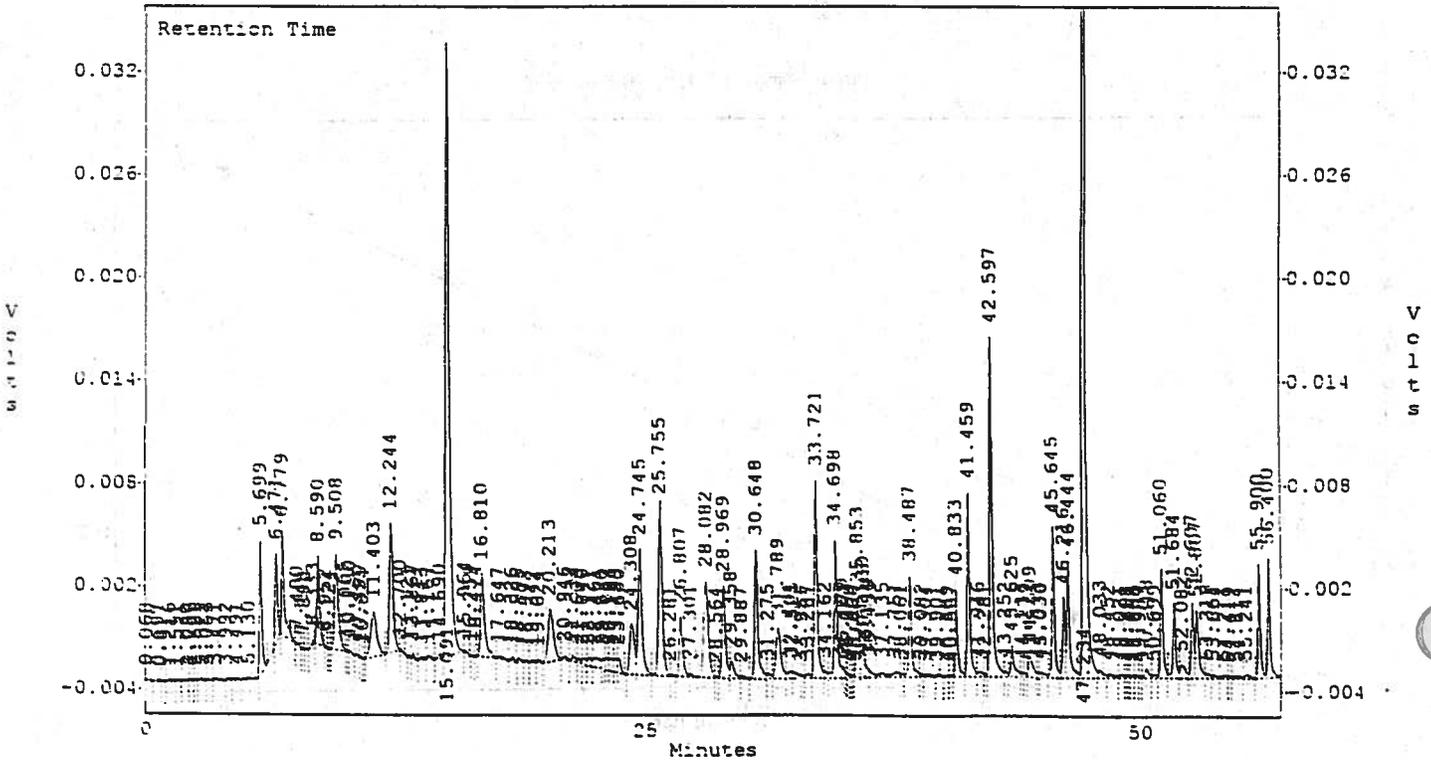
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.10
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 2.0 ppb 10
 Acquired : May 28, 1996 02:53:33
 Printed : May 29, 1996 16:41:02

c:\ezchrom\voatemp\160527.10 -- Channel A



c:\ezchrom\voatemp\160527.10 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.10
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 2.0 ppb 10
 Acquired : May 28, 1996 02:53:33
 Printed : May 29, 1996 16:41:03

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.93	6591	0.0	0	0.00	
6.12	9831	0.0	0	0.00	
6.52	3834	0.0	0	0.00	
6.72	10093	12.0	240	2.40	Vinyl Chloride
12.17	28932	13.6	271	2.71	1,1-dce
16.05	16531	10.3	207	2.07	Mtbe
16.75	39936	10.5	211	2.11	Trans 1,2-dce
24.67	34506	10.5	209	2.09	Cis 1,2-dce
28.89	27122	10.8	215	2.15	1,1-dcpe
30.42	77853	10.8	217	2.17	Benzene
31.70	1102908	5.0	100	1.00 <i>oh</i>	Flbenzene (IS)
33.63	49642	11.9	239	2.39	Tce
38.44	13569	10.3	206	2.06	Cis 1,3-dcpe
39.71	76874	11.1	221	2.21	Toluene
40.77	16700	9.5	190	1.90	Trans 1,3-dcpe
42.49	35580	10.2	204	2.04	Pce
45.60	79465	112.2	2245	22.45	1cl4fbz (surr) <i>112</i> ✓
46.14	77780	10.9	219	2.19	Chlorobenzene
46.39	68912	9.7	194	1.94	Ethylbenzene
46.71	160009 ✓	21.0	420	4.20	M/P Xylene
47.17	1090763 ✓	5.0	100	1.00 <i>oh</i>	1cl2flbz (IS)
48.57	66181	11.1	223	2.23 <i>oh</i>	O Xylene
48.77	85592	10.5	209	2.09	Styrene
49.08	8067	0.0	0	0.00	
50.12	58551	11.1	222	2.22	Isopropylbenzene
51.82	60563	10.9	218	2.18	n-propylbenzene
51.97	82240	10.8	216	2.16	Bromobenzene
52.22	3902	0.0	0	0.00	
52.52	164004	21.1	423	4.23	1,3,5-tmb/2-cl tol
52.75	77572	10.9	217	2.17	4-cl toluene
53.98	48759	11.1	223	2.23	t-butylbenzene
54.14	78715	11.2	225	2.25	1,2,4-tmb
54.50	4895	0.0	0	0.00	
54.87	55237	11.3	227	2.27	s-butylbenzene
55.48	56341	11.4	228	2.28	p-isopropyltoluene
55.84	66994	10.0	199	1.99	1,3-dcb
56.32	71831	10.5	211	2.11	1,4-dcb
56.90	2064	0.0	0	0.00	
57.23	63069	11.9	238	2.38	n-butylbenzene
57.87	58210	10.5	209	2.09	1,2-dcb
59.17	7804	0.0	0	0.00	
61.57	2271	0.0	0	0.00	
62.99	2264	0.0	0	0.00	
63.22	2962	0.0	0	0.00	
64.16	34458	12.1	243	2.43	1,2,4-tcb
64.59	26309	11.7	235	2.35	Hexachlorobutadiene
64.99	44629	9.9	199	1.99	Napthalene
65.74	31846	11.4	227	2.27	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.10
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 2.0 ppb 10
 Acquired : May 28, 1996 02:53:33
 Printed : May 29, 1996 16:41:04

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Scin(µg/l)	Compound
0.07	424	0.0	0	0.00	
0.70	890	0.0	0	0.00	
0.82	694	0.0	0	0.00	
1.22	1825	0.0	0	0.00	
1.59	1061	0.0	0	0.00	
2.09	972	0.0	0	0.00	
2.26	1141	0.0	0	0.00	
2.52	932	0.0	0	0.00	
2.82	2463	0.0	0	0.00	
3.05	1084	0.0	0	0.00	
3.47	1433	0.0	0	0.00	
3.99	1809	0.0	0	0.00	
4.49	1413	0.0	0	0.00	
5.13	1575	0.0	0	0.00	
5.70	61466	13.5	270	2.70 *	DCDFM
6.47	45647	8.3	165	1.65	CHLOROMETHANE
6.78	55010	3.6	72	0.72 †	VINYL CHLORIDE
7.49	1835	0.0	0	0.00	
7.75	630	0.0	0	0.00	
7.89	922	0.0	0	0.00	
8.33	1866	4.6	91	0.91 *	BROMOMETHANE
8.59	54874	7.1	142	1.42	CHLOROETHANE
8.95	776	0.0	0	0.00	
9.12	593	0.0	0	0.00	
9.51	73028	6.3	126	1.26 *	TCFM
10.00	503	0.0	0	0.00	
10.15	1184	0.0	0	0.00	
10.46	1338	0.0	0	0.00	
10.69	535	0.0	0	0.00	
10.82	278	0.0	0	0.00	
11.40	58426	9.0	179	1.79	FREON 113
12.24	96326	9.5	191	1.91	1,1-DCE
12.70	1274	0.0	0	0.00	
13.12	938	0.0	0	0.00	
13.37	2299	0.0	0	0.00	
13.84	2332	0.0	0	0.00	
14.17	3266	0.0	0	0.00	
14.69	2747	0.0	0	0.00	
15.09	495425	24.9	498	4.98 *	METH CHLORIDE
15.96	1671	0.0	0	0.00	
16.26	845	0.0	0	0.00	
16.47	823	0.0	0	0.00	
16.81	69294	8.8	176	1.76	TRANS 1,2-DCE
17.65	2732	0.0	0	0.00	
18.33	2745	0.0	0	0.00	
18.60	2850	0.0	0	0.00	
18.99	1163	0.0	0	0.00	
19.34	1609	0.0	0	0.00	
19.62	2322	0.0	0	0.00	
20.21	59641	8.3	166	1.66	1,1-DCA
20.95	2557	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.10
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 2.0 ppb 10
 Acquired : May 28, 1996 02:53:33
 Printed : May 29, 1996 16:41:04

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
21.33	4351	0.0	0	0.00	
21.61	2870	0.0	0	0.00	
21.84	5203	0.0	0	0.00	
22.12	6495	0.0	0	0.00	
22.46	13959	0.0	0	0.00	
22.83	5857	0.0	0	0.00	
23.05	7775	0.0	0	0.00	
23.19	11392	0.0	0	0.00	
23.50	8196	0.0	0	0.00	
23.66	10126	0.0	0	0.00	
24.31	51318	9.4	188	1.88	2,2-DCPA
24.75	105140	10.9	219	2.19	CIS 1,2-DCE
25.76	134091	10.1	203	2.03	CHLOROFORM
26.28	1013	0.0	0	0.00	
26.81	42401	9.3	186	1.86	BCM
27.30	2639	0.0	0	0.00	
28.08	96934	9.3	187	1.87	1,1,1-TCA
28.56	844	0.0	0	0.00	
28.97	68624	10.3	206	2.06	1,1-DCPE
29.36	15688	8.0	160	1.60	CARBON TET
29.89	2763	0.0	0	0.00	
30.65	92871	11.2	225	2.25	1,2-DCA
31.27	4433	0.0	0	0.00	
31.79	52693	0.0	0	0.00	
32.40	6548	14.4	288	2.88	2-CL ETH VI ETH
32.52	7703	0.0	0	0.00	
32.95	1262	0.0	0	0.00	
33.29	4476	0.0	0	0.00	
33.72	124877	12.4	248	2.48	TCE
34.16	4838	0.0	0	0.00	
34.70	88663	10.5	210	2.10	1,2-DCPA
35.08	2601	0.0	0	0.00	
35.18	2092	0.0	0	0.00	
35.27	1026	0.0	0	0.00	
35.36	1273	0.0	0	0.00	
35.50	968	0.0	0	0.00	
35.67	543	0.0	0	0.00	
35.85	44306	9.1	183	1.83	BRDICIMETHANE
36.13	15002	12.3	247	2.47	DIBROMOMETHANE
36.19	6696	0.0	0	0.00	
36.31	4170	0.0	0	0.00	
36.45	5416	0.0	0	0.00	
37.14	5528	0.0	0	0.00	
37.75	8078	0.0	0	0.00	
38.06	1807	0.0	0	0.00	
38.49	58801	8.2	165	1.65	CIS 1,3-DCPE
39.08	1960	0.0	0	0.00	
39.30	3181	0.0	0	0.00	
39.90	961	0.0	0	0.00	
40.37	1083	0.0	0	0.00	
40.57	1237	0.0	0	0.00	
40.83	44536	10.8	215	2.15	TRANS 1,3-DCPE
41.46	99223	10.0	199	1.99	1,1,2-TCA

Continued...

File .. : c:\ezchrom\voatemp\160527.10
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 2.0 ppb 10
 Acquired : May 28, 1996 02:53:33
 Printed : May 29, 1996 16:41:04

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
41.95	5604	0.0	0	0.00	
42.28	1666	0.0	0	0.00	
42.60	206196	20.5	410	4.10	1,3 DCPA/PCE
43.25	3901	0.0	0	0.00	
43.63	24349	7.9	158	1.58	DIBRCLMETHANE
44.13	2428	0.0	0	0.00	
44.28	2196	0.0	0	0.00	
44.51	20251	10.1	201	2.01	1,2-DBEA (EDB)
44.93	2179	0.0	0	0.00	
45.04	5894	0.0	0	0.00	
45.65	78864	108.7	2173	21.73	1CL4FBZ (SURR) 109 ✓
46.22	39239	12.7	253	2.53	CHLOROBENZENE
46.44	73465 ✓	8.2	164	1.64	1,1,1,2-PCA
47.23	864425 ✓	5.0	100	1.00	1CL2FBZ (IS) OK
48.03	1627	0.0	0	0.00	
48.45	2326	0.0	0	0.00	
49.02	3396	0.0	0	0.00	
49.31	1305	0.0	0	0.00	
49.42	1266	0.0	0	0.00	
49.66	1941	0.0	0	0.00	
49.80	1887	0.0	0	0.00	
49.99	1230	0.0	0	0.00	
50.32	8093	8.5	169	1.69	BROMOFORM
50.70	3547	0.0	0	0.00	
51.06	56083	11.2	223	2.23	1,1,2,2-PCA
51.68	43628	9.7	195	1.95	1,2,3-TCPA
52.08	15474	10.7	215	2.15	BROMOBENZENE
52.61	35966	11.9	238	2.38	2-CL TOLUENE
52.81	44504	11.6	232	2.32	4-CL TOLUENE
53.32	4383	0.0	0	0.00	
53.66	3346	0.0	0	0.00	
54.21	3411	0.0	0	0.00	
54.42	1504	0.0	0	0.00	
54.81	3915	0.0	0	0.00	
55.24	4915	0.0	0	0.00	
55.90	52974	11.8	236	2.36	1,3-DCB
56.40	62641	10.4	207	2.07	1,4-DCB
57.93	55676	12.7	253	2.53	1,2-DCB
58.51	1631	0.0	0	0.00	
58.67	1980	0.0	0	0.00	
58.95	1190	0.0	0	0.00	
59.12	1266	0.0	0	0.00	
59.38	3577	0.0	0	0.00	
60.06	1913	0.0	0	0.00	
60.34	1555	0.0	0	0.00	
60.60	2158	0.0	0	0.00	
60.80	1428	0.0	0	0.00	
61.26	4520	17.2	344	3.44 *	1,2-DBr-3-CPA
61.50	1627	0.0	0	0.00	
61.72	1419	0.0	0	0.00	
61.89	2028	0.0	0	0.00	
62.22	3493	0.0	0	0.00	
62.50	989	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.10
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : 2.0 ppb 10
 Acquired : May 28, 1996 02:53:33
 Printed : May 29, 1996 16:41:04

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
62.68	1071	0.0	0	0.00	
62.96	1862	0.0	0	0.00	
63.30	1635	0.0	0	0.00	
63.65	816	0.0	0	0.00	
63.98	669	0.0	0	0.00	
64.23	39261	14.0	279	2.79 *	1,2,4-TCB
64.64	69968	13.7	273	2.73 *	HEXACHLOROCYCLOHEPTADIENE
65.26	1685	0.0	0	0.00	
65.57	327	0.0	0	0.00	
65.80	29825	14.7	294	2.94 *	1,2,3-TCB
66.21	1680	0.0	0	0.00	
66.62	1706	0.0	0	0.00	
67.05	234	0.0	0	0.00	

* out of criteria, not reported for day.

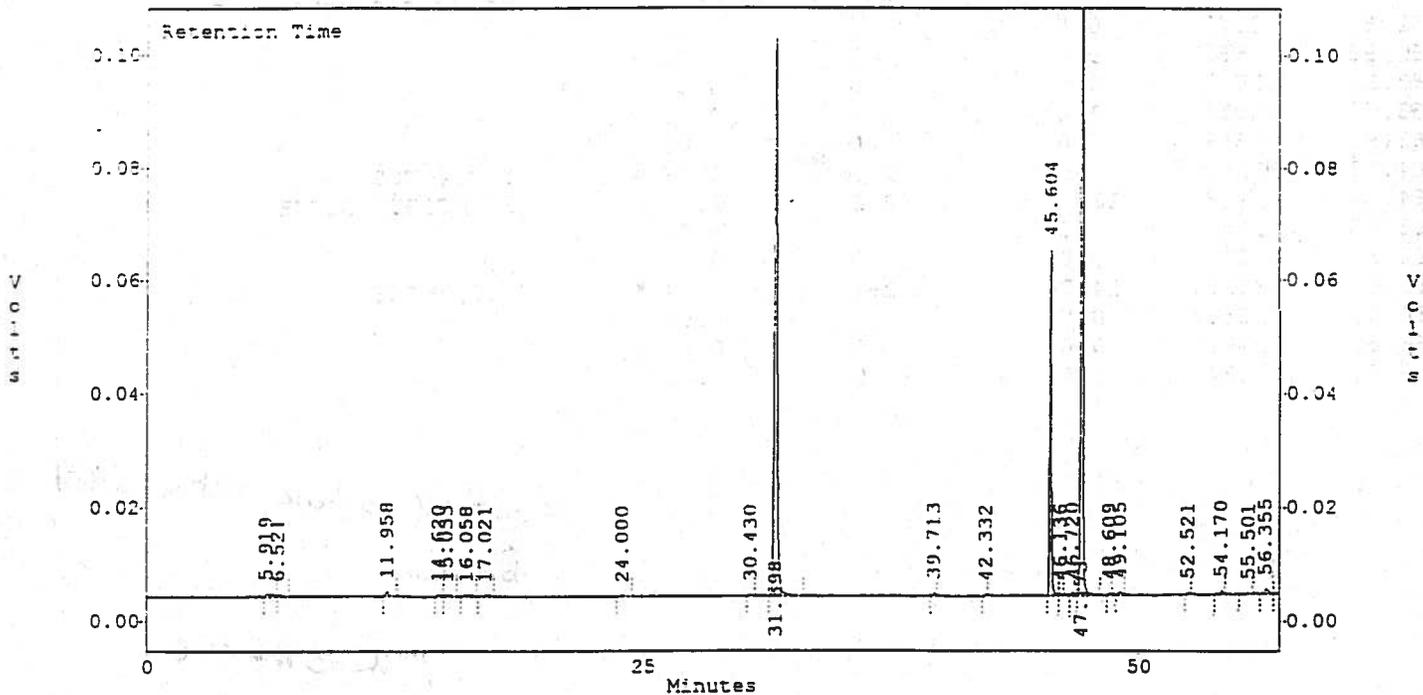
MU 30 MAY 96

HE 31 May 96

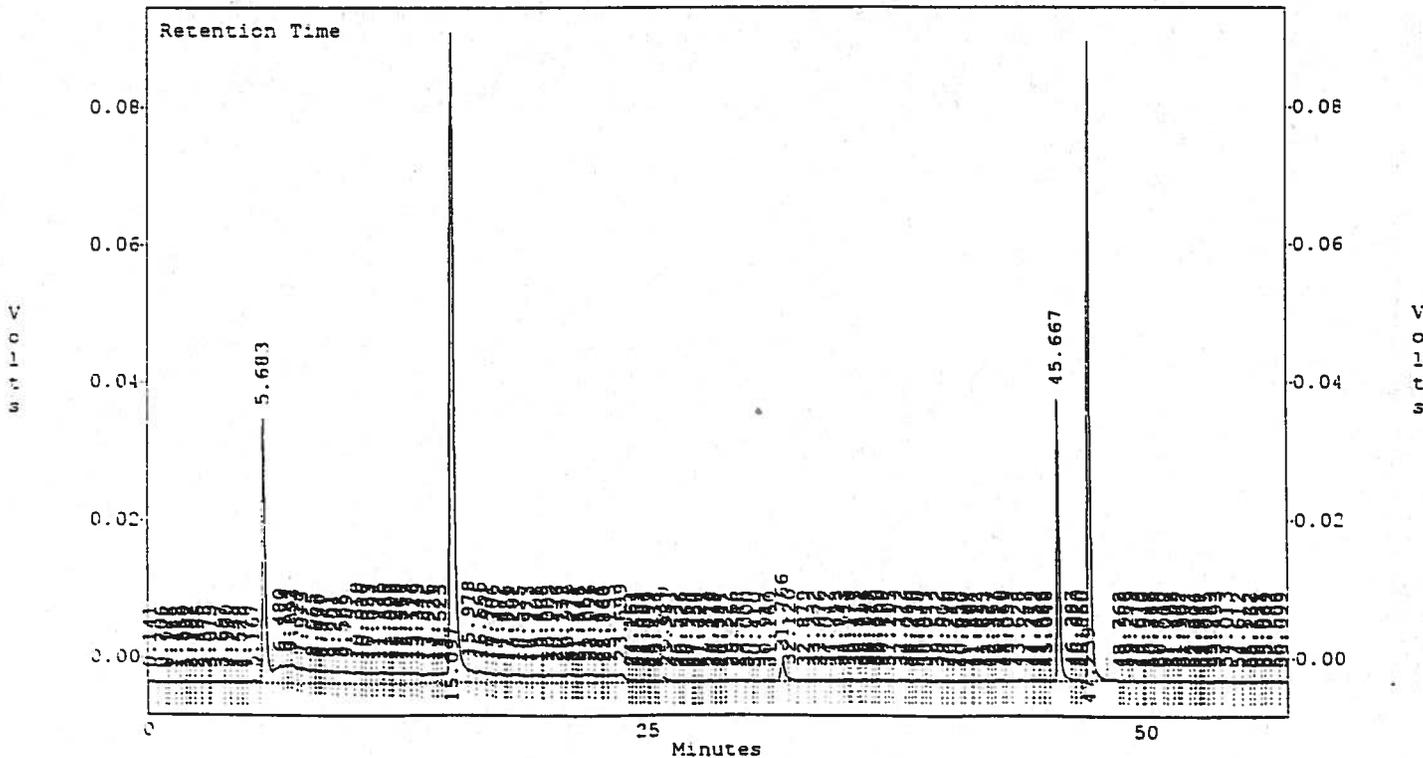
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.11
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : MTHD BLKwa 11
 Acquired : May 28, 1996 04:20:32
 Printed : May 29, 1996 16:41:24

c:\ezchrom\voatemp\160527.11 -- Channel A



c:\ezchrom\voatemp\160527.11 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.11
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : MTHD BLKwa 11
 Acquired : May 28, 1996 04:20:32
 Printed : May 29, 1996 16:41:26

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soiln(µg/L)	Compound
5.92	14149	0.0	0	0.00	
6.52	6929	8.8	175	1.75 <i>NC</i>	Vinyl Chloride
11.96	10483	5.1	103	1.03 <i>*</i>	1,1-dce
14.62	3548	0.0	0	0.00	
15.03	3947	0.0	0	0.00	
16.06	5044	0.0	0	0.00	
17.02	2806	0.0	0	0.00	
24.00	2184	0.0	0	0.00	
30.43	2191	2.5	50	0.50 <i>NM</i>	Benzene
31.70	1022876	5.0	100	1.00 <i>OK</i>	Flbenzene (IS)
39.71	5334	2.7	54	0.54 <i>NM</i>	Toluene
42.33	2474	2.0	41	0.41 <i>LMRL</i>	Pce
45.60	393883	513.1	10261	102.61	1cl4fbz (surr) /03
46.14	2652	2.5	50	0.50 <i>NC</i>	Chlorobenzene
46.72	4211	3.2	63	0.63 <i>LMRL</i>	M/P Xylene
47.17	1003317 <i>✓</i>	5.0	100	1.00 <i>OK</i>	1cl2flbz (IS)
48.61	2886	0.0	0	0.00	
49.10	7141	0.0	0	0.00	
52.52	3525	3.1	62	0.62 <i>NM</i>	1,3,5-tmb/2-cl tol
54.17	7324	2.5	50	0.50	1,2,4-tmb
55.50	2338	2.6	52	0.52	p-isopropyltoluene
56.35	11152	2.3	45	0.45 <i>LMRL</i>	1,4-dcb
57.24	3267	2.7	54	0.54 <i>NM</i>	n-butylbenzene
57.89	4068	1.4	28	0.28 <i>LMRL</i>	1,2-dcb
59.16	4560	0.0	0	0.00	
60.14	2197	0.0	0	0.00	
63.22	4216	0.0	0	0.00	
64.99	7752	2.7	53	0.53 <i>NM</i>	Napthalene
65.74	5767	3.5	70	0.70	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.11
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : MTHD BLKwa 11
 Acquired : May 28, 1996 04:20:32
 Printed : May 29, 1996 16:41:27

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Scln(µg/l)	Compound
0.14	1152	0.0	0	0.00	
0.71	1579	0.0	0	0.00	
0.97	434	0.0	0	0.00	
1.16	985	0.0	0	0.00	
1.45	436	0.0	0	0.00	
1.80	1356	0.0	0	0.00	
1.98	859	0.0	0	0.00	
2.17	1223	0.0	0	0.00	
2.47	1455	0.0	0	0.00	
2.88	1733	0.0	0	0.00	
3.08	495	0.0	0	0.00	
3.70	3232	0.0	0	0.00	
3.90	2633	0.0	0	0.00	
4.15	2239	0.0	0	0.00	
4.53	1456	0.0	0	0.00	
4.78	1714	0.0	0	0.00	
5.17	7532	0.0	0	0.00	
5.68	372857	62.0	1240	12.40	NM DCFM
6.48	66761	11.0	221	2.21	↓ CHLOROMETHANE
6.72	34119	1.7	34	0.34	LMCL VINYL CHLORIDE
6.95	32074	0.0	0	0.00	
7.09	40753	0.0	0	0.00	
7.33	24704	0.0	0	0.00	
7.57	53017	0.0	0	0.00	
8.07	31387	0.0	0	0.00	
8.30	20273	12.6	252	2.52	NM BROMOMETHANE
8.44	8380	0.0	0	0.00	
8.52	22330	4.1	83	0.83	↓ CHLOROETHANE
8.86	39470	0.0	0	0.00	
9.20	27459	0.0	0	0.00	
9.57	39773	4.1	82	0.82	↓ TCFM
9.77	38587	0.0	0	0.00	
10.31	32438	0.0	0	0.00	
10.59	17068	0.0	0	0.00	
10.83	22881	0.0	0	0.00	
11.09	22935	0.0	0	0.00	
11.44	31705	6.5	130	1.30	NM FREON 113
11.68	24363	0.0	0	0.00	
11.91	10552	0.0	0	0.00	
12.03	7575	3.2	63	0.63	*LMCL DAAR - 0.0095 ✓ 1,1-DCE
12.31	31443	0.0	0	0.00	
12.51	15798	0.0	0	0.00	
12.77	31420	0.0	0	0.00	
13.13	25925	0.0	0	0.00	
13.35	19588	0.0	0	0.00	
13.98	41595	0.0	0	0.00	
14.22	15829	0.0	0	0.00	
14.52	14901	0.0	0	0.00	
15.10	1448187	94.3	1885	18.85	NM METH CHLORIDE
15.98	39503	0.0	0	0.00	
16.57	46511	7.3	147	1.47	NC TRANS 1,2-DCE

Continued...

File : c:\ezchrom\voatemp\160527.11
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : MTHD ELKwa 11
 Acquired : May 29, 1996 04:20:32
 Printed : May 29, 1996 16:41:27

Channel B Results

RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
16.90	24077	0.0	0	0.00	
17.21	12316	0.0	0	0.00	
17.47	32116	0.0	0	0.00	
17.83	8375	0.0	0	0.00	
17.95	13046	0.0	0	0.00	
18.20	29033	0.0	0	0.00	
18.53	24637	0.0	0	0.00	
18.97	19296	0.0	0	0.00	
19.40	30806	0.0	0	0.00	
19.67	7193	0.0	0	0.00	
20.00	29910	6.1	121	1.21	NM 1,1-DCA
20.43	33405	0.0	0	0.00	
20.77	13517	0.0	0	0.00	
20.98	27404	0.0	0	0.00	
21.27	11062	0.0	0	0.00	
21.44	8914	0.0	0	0.00	
21.55	9361	0.0	0	0.00	
21.86	24288	0.0	0	0.00	
22.10	24570	0.0	0	0.00	
22.43	22269	0.0	0	0.00	
22.76	7932	0.0	0	0.00	
22.86	13363	0.0	0	0.00	
23.13	25733	0.0	0	0.00	
23.70	35314	0.0	0	0.00	
24.16	3365	2.6	52	0.52	NM 2,2-DCEPA
24.25	2896	0.0	0	0.00	
24.56	2867	3.5	70	0.70	NC CIS 1,2-DCE
24.75	2809	0.0	0	0.00	
24.86	2824	0.0	0	0.00	
25.09	830	0.0	0	0.00	
25.27	2756	0.0	0	0.00	
25.43	1444	0.0	0	0.00	
25.82	9979	0.0	0	0.00	
25.99	5164	0.0	0	0.00	
26.53	1451	0.0	0	0.00	
26.73	972	4.6	92	0.92	NM BCM
26.97	2079	0.0	0	0.00	
27.33	485	0.0	0	0.00	
27.46	1142	0.0	0	0.00	
27.62	691	0.0	0	0.00	
28.12	4083	0.0	0	0.00	
28.28	1412	0.0	0	0.00	
28.59	1552	0.0	0	0.00	
28.75	1991	0.0	0	0.00	
29.27	4740	7.1	143	1.43	NM CARBON TET
29.55	3643	0.0	0	0.00	
30.00	2253	0.0	0	0.00	
30.41	770	0.0	0	0.00	
30.95	3290	0.0	0	0.00	
31.16	1294	0.0	0	0.00	
31.77	47187	0.0	0	0.00	
32.12	7695	15.3	305	3.05	NM 2-CL ETH VI ETH
32.88	5658	0.0	0	0.00	

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File : c:\ezchrom\voatemp\160527.11
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : MTHD BLKwa 11
 Acquired : May 28, 1996 04:20:32
 Printed : May 29, 1996 16:41:27

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
33.33	3366	0.0	0	0.00	
33.68	6983	4.5	90	0.90 <i>NC</i>	TCE
34.04	2232	0.0	0	0.00	
34.49	4837	0.0	0	0.00	
34.74	3300	2.3	46	0.46 <i>LMRC</i>	1,2-DCPA
34.95	4517	0.0	0	0.00	
35.17	1827	0.0	0	0.00	
35.41	4284	0.0	0	0.00	
35.71	1533	0.0	0	0.00	
35.90	3842	4.2	84	0.84 <i>NM</i>	BRDICLMETHANE
36.13	4381	11.0	221	2.21 ↓	DIBROMOMETHANE
36.37	2115	0.0	0	0.00	
36.56	2833	0.0	0	0.00	
36.80	4001	0.0	0	0.00	
37.11	2062	0.0	0	0.00	
37.22	2480	0.0	0	0.00	
37.77	7894	0.0	0	0.00	
38.07	1932	0.0	0	0.00	
38.24	1548	0.0	0	0.00	
38.47	1745	2.3	47	0.47 <i>LMRC</i>	CIS 1,3-DCPE
38.63	3759	0.0	0	0.00	
38.94	2278	0.0	0	0.00	
39.08	2171	0.0	0	0.00	
39.57	5788	0.0	0	0.00	
39.91	2449	0.0	0	0.00	
40.25	2530	0.0	0	0.00	
40.65	3024	0.0	0	0.00	
40.84	752	5.3	105	1.05 <i>NC</i>	TRANS 1,3-DCPE
41.20	2702	0.0	0	0.00	
41.34	744	0.0	0	0.00	
41.51	1635	2.8	55	0.55 <i>NM</i>	1,1,2-TCA
41.89	2824	0.0	0	0.00	
42.14	1098	0.0	0	0.00	
42.35	1211	0.0	0	0.00	
42.71	3211	0.0	0	0.00	
42.86	918	0.0	0	0.00	
43.06	2413	0.0	0	0.00	
43.63	4164	4.7	94	0.94 <i>NM</i>	DIBRCLMETHANE
44.28	1826	0.0	0	0.00	
44.45	1304	6.3	126	1.26 <i>NM</i>	1,2-DBEA (EDB)
44.86	1391	0.0	0	0.00	
45.05	1678	0.0	0	0.00	
45.67	360911	485.7	9714	97.14	1CL4FBZ (SURR) 97
46.39	2480	3.2	64	0.64 <i>NM</i>	1,1,1,2-PCA
46.62	2517	0.0	0	0.00	
46.86	927	0.0	0	0.00	
47.24	796531 ✓	5.0	100	1.00 <i>OK</i>	1CL2FBZ (IS)
48.76	396	0.0	0	0.00	
48.99	1562	0.0	0	0.00	
49.28	538	0.0	0	0.00	
49.68	1496	0.0	0	0.00	
49.94	310	0.0	0	0.00	
50.24	1892	6.8	135	1.35 <i>NM</i>	BROMOFORM

Continued...

File : c:\ezchrom\voatemp\160527.11
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : MTHD BLKwa 11
 Acquired : May 28, 1996 04:20:32
 Printed : May 29, 1996 16:41:27

Chromatogram Results

RT(min)	PK Area	ng	Scin (µg/kg)	Soln (µg/l)	Compound
50.37	875	0.0	0	0.00	
50.74	3063	0.0	0	0.00	
51.01	1008	4.9	98	0.98	NM 1,1,2,2-PCA
51.41	2248	0.0	0	0.00	
51.50	1727	0.0	0	0.00	
51.70	1092	2.5	51	0.51	1,2,3-TCPA
51.91	4249	7.6	152	1.52	BROMOBENZENE
52.33	1619	0.0	0	0.00	
52.51	1010	4.3	86	0.86	2-CL TOLUENE
52.75	302	0.0	0	0.00	
52.84	877	3.8	77	0.77	4-CL TOLUENE
53.03	1632	0.0	0	0.00	
53.23	2331	0.0	0	0.00	
53.49	4007	0.0	0	0.00	
54.01	4195	0.0	0	0.00	
54.61	1428	0.0	0	0.00	
55.12	2322	0.0	0	0.00	
55.26	1044	0.0	0	0.00	
55.53	2369	0.0	0	0.00	
55.83	1605	5.4	108	1.08	NC 1,3-DCB
55.97	2735	0.0	0	0.00	
56.51	2938	4.0	81	0.81	1,4-DCB
56.70	2335	0.0	0	0.00	
57.04	1929	0.0	0	0.00	
57.28	915	0.0	0	0.00	
57.43	1071	0.0	0	0.00	
57.57	353	0.0	0	0.00	
57.96	4226	6.3	126	1.26	1,2-DCB
58.26	954	0.0	0	0.00	
58.55	857	0.0	0	0.00	
58.73	1155	0.0	0	0.00	
59.12	1453	0.0	0	0.00	
59.50	3139	0.0	0	0.00	
59.76	2817	0.0	0	0.00	
60.18	2638	0.0	0	0.00	
60.48	1546	0.0	0	0.00	
60.61	1148	0.0	0	0.00	
61.18	5853	18.5	370	3.70	NM 1,2-DBr-3-CPA
61.54	3848	0.0	0	0.00	
61.84	4150	0.0	0	0.00	
61.98	1659	0.0	0	0.00	
62.40	9474	0.0	0	0.00	
62.93	1170	0.0	0	0.00	
63.09	2037	0.0	0	0.00	
63.32	4949	0.0	0	0.00	
63.85	5553	0.0	0	0.00	
64.25	2434	8.3	166	1.66	NM 1,2,4-TCB
64.66	10418	6.9	138	1.38	NC HEXACLBTADIENE
65.29	7454	0.0	0	0.00	
65.58	3035	0.0	0	0.00	
65.80	4351	10.7	215	2.15	NM 1,2,3-TCB
66.02	1507	0.0	0	0.00	
66.24	3540	0.0	0	0.00	

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File : c:\ezchrom\voatemp\160527.11
Method : c:\ezchrom\voatemp\lvoa0527.met
Sample ID : MTHD BLKwa 11
Acquired : May 28, 1996 04:20:32
Printed : May 29, 1996 16:41:27

Channel B Results

RT(min)	pK Area	ng	Scil(µg/kg)	Soln(µg/l)	Compound
66.64	1761	0.0	0	0.00	
66.92	338	0.0	0	0.00	

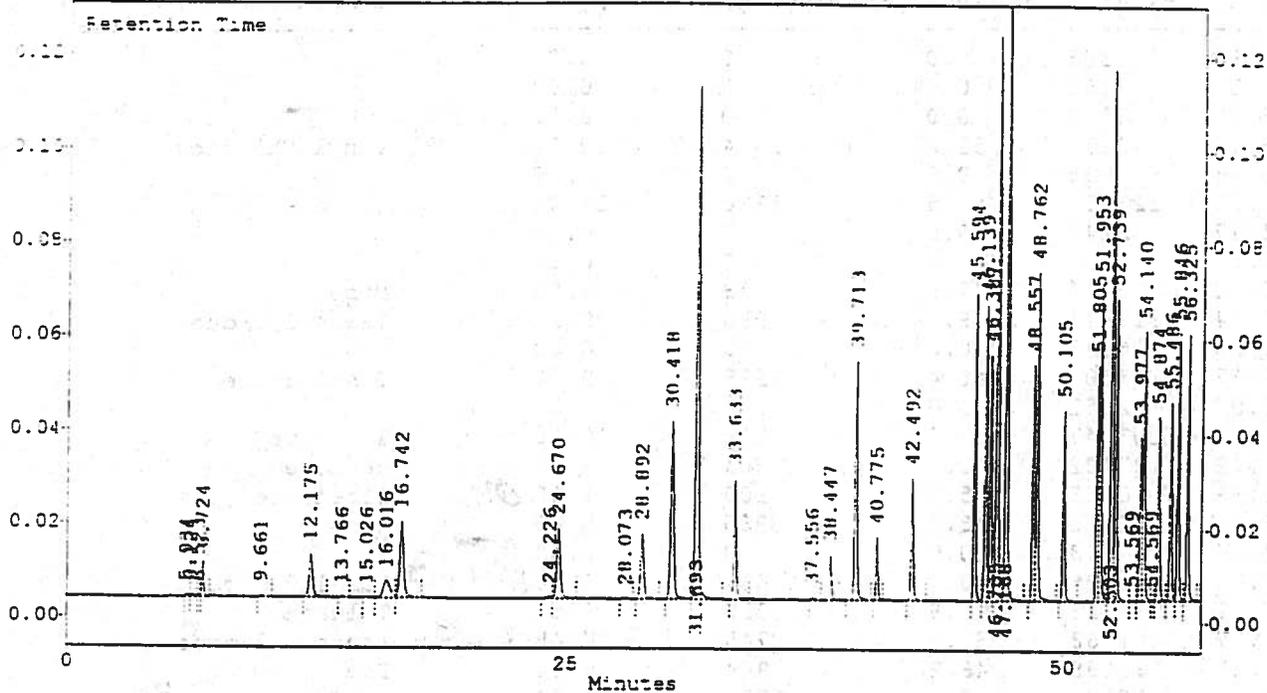
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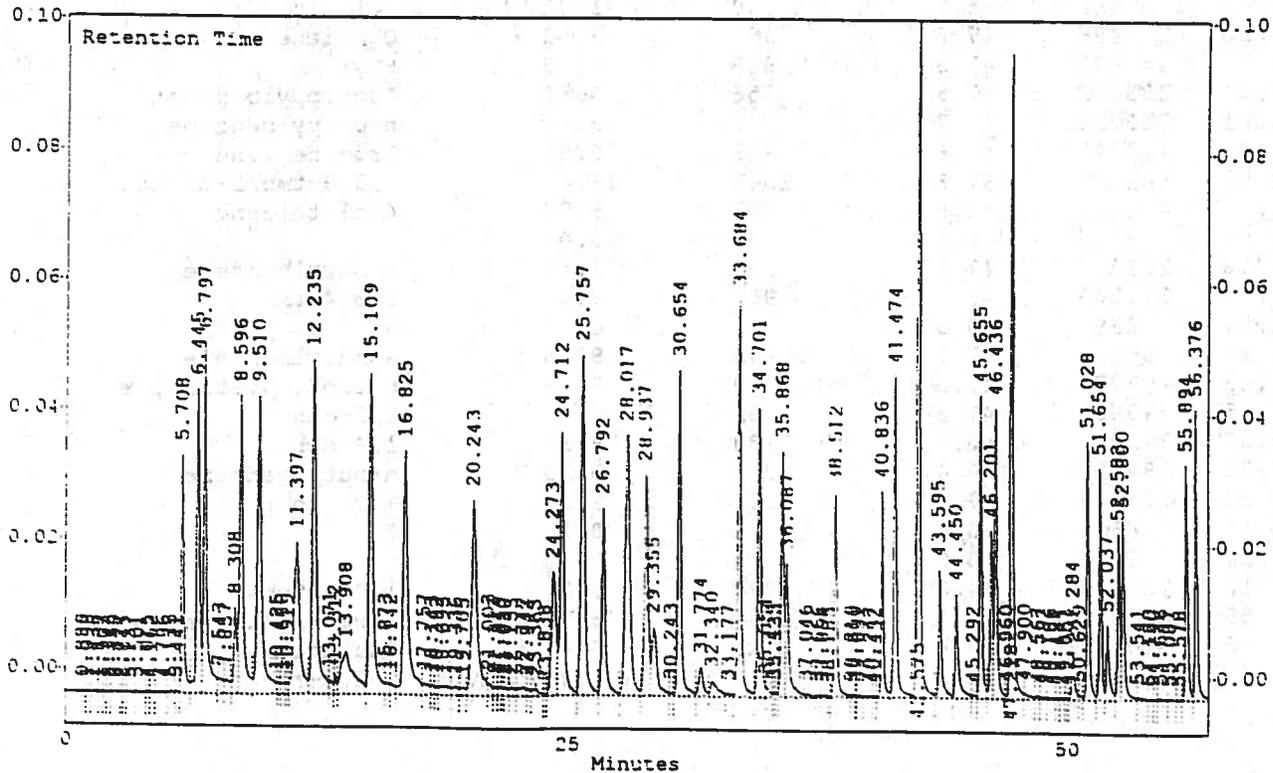
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.12
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : CHK VOA 12
 Acquired : May 28, 1996 05:49:38
 Printed : May 29, 1996 16:41:50

c:\ezchrom\voatemp\160527.12 -- Channel A



c:\ezchrom\voatemp\160527.12 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.12
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : CHK VOA 12
 Acquired : May 28, 1996 05:49:38
 Printed : May 29, 1996 16:41:52

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.93	6103	0.0	0	0.00	
6.12	7386	0.0	0	0.00	
6.52	3512	0.0	0	0.00	
6.72	42210	51.2	1024	10.24	Vinyl Chloride
9.66	3358	0.0	0	0.00	
12.18	121939	56.8	1136	11.36	1,1-dce
13.77	2248	0.0	0	0.00	
15.03	2711	0.0	0	0.00	
16.02	86916	47.6	953	9.53	Mtbe
16.74	216747	49.8	995	9.95	Trans 1,2-dce
24.23	6247	0.0	0	0.00	
24.67	191508	46.4	928	9.28	Cis 1,2-dce
28.07	2351	0.0	0	0.00	
28.89	163047	51.3	1026	10.26	1,1-dcpe
30.42	427162	48.3	966	9.66	Benzene
31.69	1130113	5.0	100	1.00	Flbenzene (IS)
33.63	232116	48.3	966	9.66	Tce
37.56	4293	0.0	0	0.00	
38.45	71908	40.7	814	8.14	Cis 1,3-dcpe
39.71	399823	47.9	958	9.58	Toluene
40.77	87588	37.3	745	7.45	Trans 1,3-dcpe
42.49	193688	48.2	964	9.64	Pce
45.59	416273	487.9	9759	97.59	1cl4fbz (surr) 98
46.14	408957	47.2	943	9.43	Chlorobenzene
46.39	365800	48.6	972	9.72	Ethylbenzene
46.71	842746	97.2	1944	19.44	M/P Xylene
47.17	1117411	5.0	100	1.00	1cl2flbz (IS)
48.56	343496	47.6	953	9.53	O Xylene
48.76	462673	47.5	949	9.49	Styrene
50.10	293002	47.8	956	9.56	Isopropylbenzene
51.81	319810	47.7	954	9.54	n-propylbenzene
51.95	440395	47.6	951	9.51	Bromobenzene
52.50	861406	97.3	1947	19.47	1,3,5-tmb/2-cl tol
52.74	404629	47.6	953	9.53	4-cl toluene
53.57	3019	0.0	0	0.00	
53.98	252386	47.8	956	9.56	t-butylbenzene
54.14	387569	48.2	964	9.64	1,2,4-tmb
54.57	2394	0.0	0	0.00	
54.87	280107	47.3	945	9.45	s-butylbenzene
55.49	283773	47.5	949	9.49	p-isopropyltoluene
55.85	349930	47.6	952	9.52	1,3-dcb
56.32	342567	46.9	938	9.38	1,4-dcb
57.23	294450	46.4	929	9.29	n-butylbenzene
57.88	287319	47.9	958	9.58	1,2-dcb
60.15	6345	0.0	0	0.00	
63.24	2776	0.0	0	0.00	
64.16	155934	44.0	880	8.80	1,2,4-tcb
64.59	109311	42.5	850	8.50	Hexachlorobutadiene
64.98	210904	42.4	848	8.48	Napthalene
65.73	125156	39.3	786	7.86	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.12
 Method : c:\ezchrom\voatemp\lvca0527.met
 Sample ID : CHK VOA 12
 Acquired : May 28, 1996 05:49:38
 Printed : May 29, 1996 16:41:52

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
0.89	897	0.0	0	0.00	
1.10	781	0.0	0	0.00	
1.44	2004	0.0	0	0.00	
1.74	1190	0.0	0	0.00	
1.90	680	0.0	0	0.00	
2.14	866	0.0	0	0.00	
2.40	3431	0.0	0	0.00	
2.73	756	0.0	0	0.00	
2.88	452	0.0	0	0.00	
3.14	1826	0.0	0	0.00	
3.50	3183	0.0	0	0.00	
4.02	1658	0.0	0	0.00	
4.16	1944	0.0	0	0.00	
4.80	4628	0.0	0	0.00	
5.14	5358	0.0	0	0.00	
5.44	2193	0.0	0	0.00	
5.71	333026	48.9	978	9.78	DCDFM
6.44	491558	51.1	1023	10.23	CHLOROMETHANE
6.80	545587	51.0	1020	10.20	VINYL CHLORIDE
7.54	41477	0.0	0	0.00	
7.86	41088	0.0	0	0.00	
8.31	136541	53.5	1069	10.69	BROMOMETHANE
8.60	600136	56.0	1120	11.20	CHLOROETHANE
9.51	719802	50.8	1016	10.16	TCFM
10.42	15122	0.0	0	0.00	
10.68	25889	0.0	0	0.00	
10.92	16704	0.0	0	0.00	
11.40	507031	51.7	1035	10.35	FREON 113
12.24	787744	56.0	1120	11.20	1,1-DCE
13.07	26133	0.0	0	0.00	
13.31	24673	0.0	0	0.00	
13.91	300683	0.0	0	0.00	
15.11	733591	37.2	745	7.45 <i>OK in CTL</i>	METH CHLORIDE
15.87	26911	0.0	0	0.00	
16.14	25511	0.0	0	0.00	
16.82	650764	51.0	1019	10.19	TRANS 1,2-DCE
17.76	38814	0.0	0	0.00	
18.14	19116	0.0	0	0.00	
18.39	13511	0.0	0	0.00	
18.69	49931	0.0	0	0.00	
19.34	29067	0.0	0	0.00	
19.71	22780	0.0	0	0.00	
20.24	573680	48.1	962	9.62	1,1-DCA
21.00	29039	0.0	0	0.00	
21.33	16669	0.0	0	0.00	
21.52	16053	0.0	0	0.00	
21.69	8387	0.0	0	0.00	
21.84	16544	0.0	0	0.00	
22.15	25068	0.0	0	0.00	
22.74	37538	0.0	0	0.00	
22.94	12988	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.12
 Method : c:\ezchrom\voatemp\lvca0527.met
 Sample ID : CHK VOA 12
 Acquired : May 28, 1996 05:49:38
 Printed : May 29, 1996 16:41:52

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
23.36	25739	0.0	0	0.00	
23.84	1547	0.0	0	0.00	
24.27	324639	44.8	896	8.96	2,2-DCPA
24.71	583184	43.2	865	8.65	CIS 1,2-DCE
25.76	751580	48.2	963	9.63	CHLOROFORM
26.79	372304	44.0	880	8.80	BCM
28.02	682668	51.2	1024	10.24	1,1,1-TCA
28.94	446332	49.0	979	9.79	1,1-DCPE
29.35	209307	22.4	447	4.47	CARBON TET
30.24	5927	0.0	0	0.00	
30.65	568052	46.1	922	9.22	1,2-DCA
31.77	73701	0.0	0	0.00	
32.34	63104	39.3	786	7.86	2-CL ETH VI ETH
33.18	9802	0.0	0	0.00	
33.68	647056	44.9	898	8.98	TCE
34.70	489698	46.1	921	9.21	1,2-DCPA
35.05	16649	0.0	0	0.00	
35.42	4689	0.0	0	0.00	
35.53	5805	0.0	0	0.00	
35.87	345116	42.9	858	8.58	BRDCLMETHANE
36.09	265928	42.5	849	8.49	DIBROMOMETHANE
37.05	9559	0.0	0	0.00	
37.67	3792	0.0	0	0.00	
37.89	6743	0.0	0	0.00	
38.19	1405	0.0	0	0.00	
38.51	315000	33.0	661	6.61	CIS 1,3-DCPE
39.32	5507	0.0	0	0.00	
39.50	909	0.0	0	0.00	
39.63	5092	0.0	0	0.00	
40.25	6592	0.0	0	0.00	
40.43	1944	0.0	0	0.00	
40.84	250042	34.5	690	6.90	TRANS 1,3-DCPE
41.47	477820	36.9	738	7.38	1,1,2-TCA
42.58	1150253	85.2	1704	17.04	1,3 DCPA/PCE
43.60	216484	36.4	727	7.27	DIBRCLMETHANE
44.45	185350	40.7	814	8.14	1,2-DBEA (EDB)
45.29	7270	0.0	0	0.00	
45.66	390742	454.8	9096	90.96	1CL4FBZ (SURR) 9/
46.20	210239	41.7	834	8.34	CHLOROBENZENE
46.44	442393	32.2	645	6.45	1,1,1,2-PCA
46.96	5183	0.0	0	0.00	
47.22	922772	5.0	100	1.00	1CL2FBZ (IS)
47.90	17945	0.0	0	0.00	
48.57	6690	0.0	0	0.00	
48.79	6302	0.0	0	0.00	
49.19	5967	0.0	0	0.00	
49.45	2192	0.0	0	0.00	
49.84	2489	0.0	0	0.00	
49.95	1887	0.0	0	0.00	
50.28	79467	26.8	535	5.35	BROMOFORM
50.63	7754	0.0	0	0.00	
51.03	349360	42.1	842	8.42	1,1,2,2-PCA
51.65	284473	47.6	953	9.53	1,2,3-TCPA

Continued...

File : c:\ezchrom\voatemp\160527.12
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : CHK VOA 12
 Acquired : May 28, 1996 05:49:38
 Printed : May 29, 1996 16:41:52

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
52.04	119105	38.7	774	7.74	OK IN CTL BROMOBENZENE
52.58	193396	43.5	870	8.70	2-CL TOLUENE
52.80	247829	44.9	898	8.98	4-CL TOLUENE
53.54	9680	0.0	0	0.00	
54.12	2517	0.0	0	0.00	
54.29	1268	0.0	0	0.00	
54.65	5182	0.0	0	0.00	
55.09	1866	0.0	0	0.00	
55.58	1008	0.0	0	0.00	
55.89	299164	40.1	803	8.03	OK IN CTL 1,3-DCB
56.38	352747	39.6	791	7.91	↓ 1,4-DCB
57.28	2822	0.0	0	0.00	
57.61	3269	0.0	0	0.00	
57.95	337197	45.0	900	9.00	1,2-DCB
58.60	4836	0.0	0	0.00	
58.94	838	0.0	0	0.00	
59.14	1885	0.0	0	0.00	
59.45	2331	0.0	0	0.00	
59.82	1557	0.0	0	0.00	
60.23	2387	0.0	0	0.00	
60.37	1838	0.0	0	0.00	
60.67	2265	0.0	0	0.00	
61.27	38231	39.5	790	7.90	OK IN CTL 1,2-DBr-3-CPA
62.13	2580	0.0	0	0.00	
62.36	283	0.0	0	0.00	
63.26	979	0.0	0	0.00	
63.43	2143	0.0	0	0.00	
64.22	223292	40.3	806	8.06	↓ 1,2,4-TCB
64.64	347947	43.2	864	8.64	HEXAChL BUTADIENE
65.33	4011	0.0	0	0.00	
65.58	3775	0.0	0	0.00	
65.79	175000	36.9	737	7.37	OK IN CTL 1,2,3-TCB
66.51	3718	0.0	0	0.00	
66.93	1561	0.0	0	0.00	

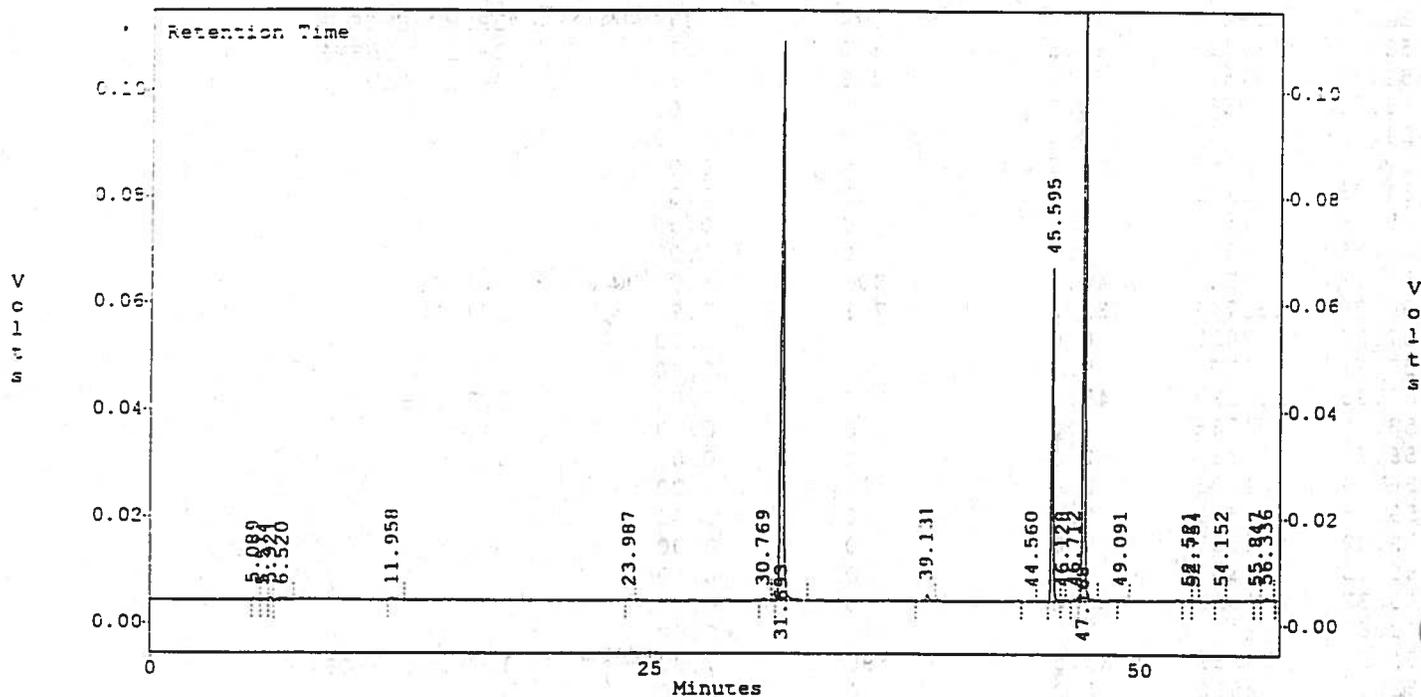
MM 30 May 96

AB 31 May 96

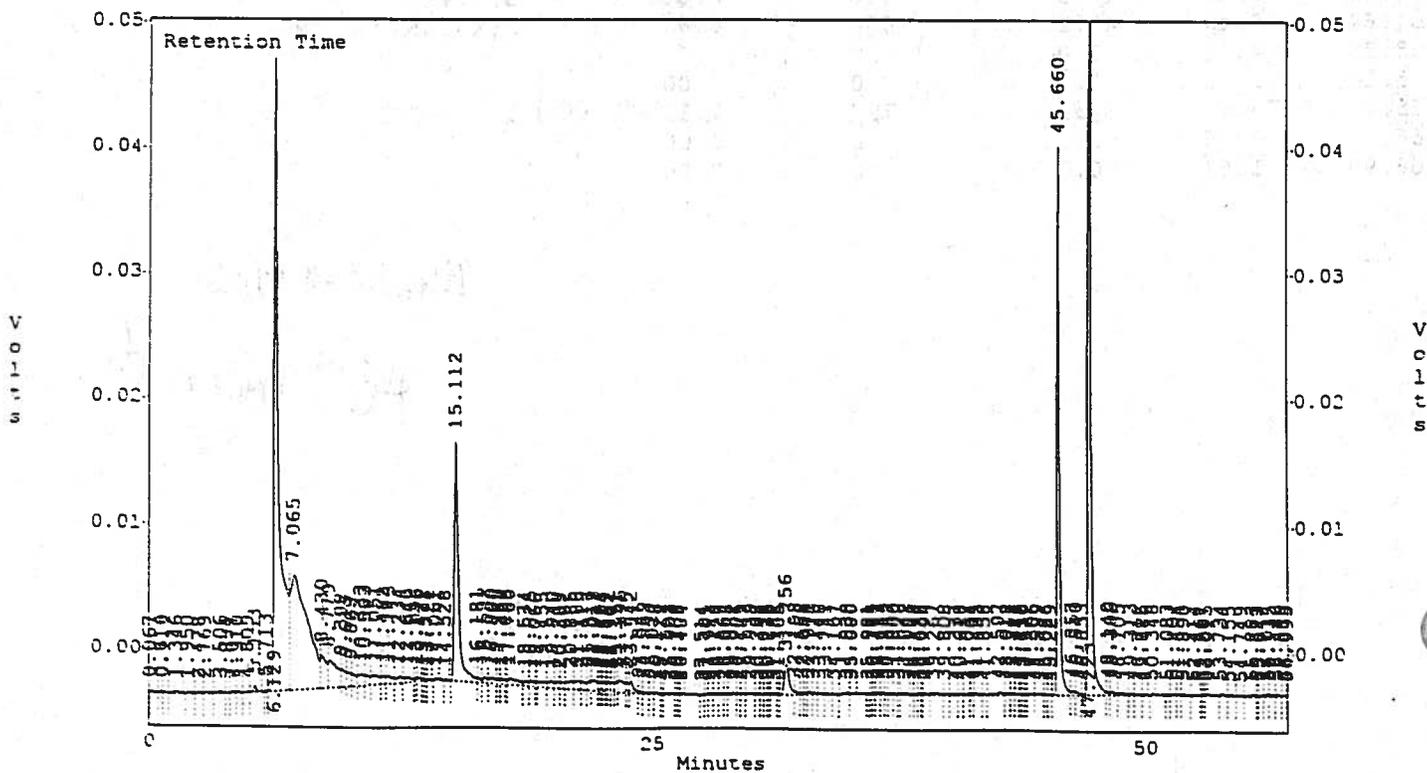
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.13
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : 4850 13
 Acquired : May 28, 1996 07:19:03
 Printed : May 29, 1996 16:42:12

c:\ezchrom\voatemp\160527.13 -- Channel A



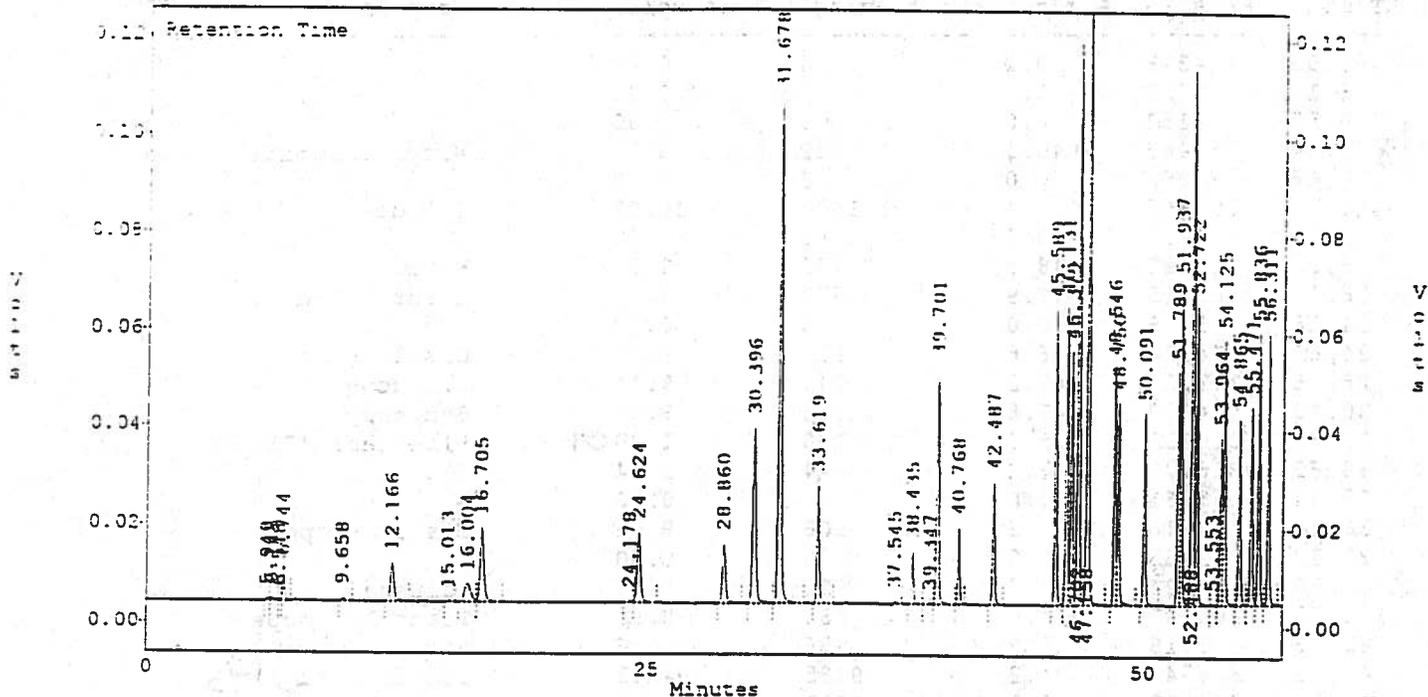
c:\ezchrom\voatemp\160527.13 -- Channel B



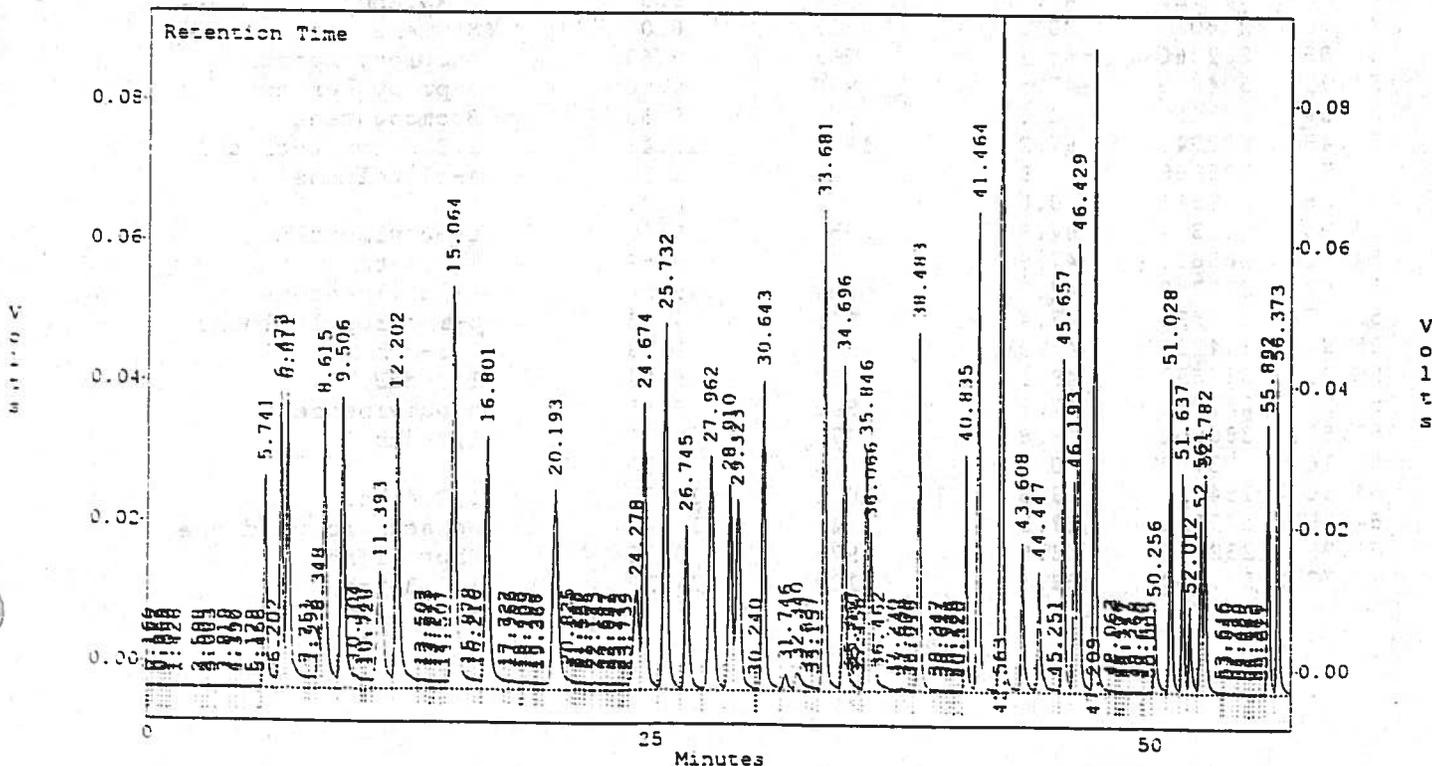
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.17
 Method : c:\ezchrom\voatemp\1voa0527.met
 Sample ID : CTL VOA 1
 Acquired : May 28, 1996 13:13:10
 Printed : May 29, 1996 16:43:43

c:\ezchrom\voatemp\160527.17 -- Channel B



c:\ezchrom\voatemp\160527.17 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.17
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : CTL VOA 1
 Acquired : May 28, 1996 13:13:10
 Printed : May 29, 1996 16:43:45

Channel A Results

RT (min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
5.95	4378	0.0	0	0.00	
6.15	8727	0.0	0	0.00	
6.55	2152	0.0	0	0.00	
6.74	36446	46.1	922	9.22	Vinyl Chloride
9.66	5082	0.0	0	0.00	
12.17	103667	50.4	1009	10.09	1,1-dce
15.01	2402	0.0	0	0.00	
16.00	85210	48.8	975	9.75	Mtbe
16.70	203815	48.9	978	9.78	Trans 1,2-dce
24.18	3719	0.0	0	0.00	
24.62	184224	46.6	933	9.33	Cis 1,2-dce
28.86	143014	47.2	944	9.44	1,1-dcpe
30.40	404679	47.8	956	9.56	Benzene
31.68	1066238	5.0	100	1.00	Flbenzene (IS)
33.62	216770	47.2	944	9.44	Tce
37.54	5061	0.0	0	0.00	
38.44	77218	45.3	906	9.06	Cis 1,3-dcpe
39.35	2433	0.0	0	0.00	
39.70	380424	47.6	952	9.52	Toluene
40.77	100242	44.0	880	8.80	Trans 1,3-dcpe
42.49	183719	47.8	956	9.56	Pce
45.59	386748	474.2	9485	94.85	1cl4fbz (surr) 95
46.13	394882	47.5	951	9.51	Chlorobenzene
46.38	360942	50.1	1002	10.02	Ethylbenzene
46.70	807302	97.3	1945	19.45	M/P Xylene
47.16	1069522	5.0	100	1.00	1cl2flbz (IS)
48.55	329123	47.7	954	9.54	O Xylene
48.75	276033	30.3	605	6.05	Styrene
50.09	282360	48.1	963	9.63	Isopropylbenzene
51.79	304839	47.5	950	9.50	n-propylbenzene
51.94	425450	48.0	960	9.60	Bromobenzene
52.49	822942	97.2	1943	19.43	1,3,5-tmb/2-cl tol
52.72	388968	47.8	957	9.57	4-cl toluene
53.55	2511	0.0	0	0.00	
53.96	242354	47.9	959	9.59	t-butylbenzene
54.12	368631	47.9	959	9.59	1,2,4-tmb
54.87	270780	47.7	954	9.54	s-butylbenzene
55.47	271396	47.4	948	9.48	p-isopropyltoluene
55.84	344200	48.9	978	9.78	1,3-dcb
56.31	336657	48.1	962	9.62	1,4-dcb
57.22	287091	47.3	945	9.45	n-butylbenzene
57.87	280062	48.8	976	9.76	1,2-dcb
60.16	3708	0.0	0	0.00	
64.16	184029	53.6	1071	10.71	1,2,4-tcb
64.59	142731	57.3	1147	11.47	Hexachlorobutadiene
64.99	232835	48.8	975	9.75	Napthalene
65.73	173834	56.5	1129	11.29	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160527.17
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : CTL VOA 1
 Acquired : May 28, 1996 13:13:10
 Printed : May 29, 1996 16:43:45

Channel B Results

RT(min)	pK Area	ng	Soil(µg/kg)	Soln(µg/l)	Compound
0.16	258	0.0	0	0.00	
0.53	825	0.0	0	0.00	
0.66	569	0.0	0	0.00	
0.77	336	0.0	0	0.00	
1.09	379	0.0	0	0.00	
1.43	1751	0.0	0	0.00	
2.60	887	0.0	0	0.00	
2.91	490	0.0	0	0.00	
3.08	2006	0.0	0	0.00	
3.82	2638	0.0	0	0.00	
4.16	1627	0.0	0	0.00	
4.33	698	0.0	0	0.00	
5.18	3250	0.0	0	0.00	
5.47	663	0.0	0	0.00	
5.74	311141	52.7	1053	10.53	DCDFM
6.20	12797	0.0	0	0.00	
6.47	424198	51.3	1026	10.26	CHLOROMETHANE
6.81	487867	53.1	1062	10.62	VINYL CHLORIDE
7.75	15432	0.0	0	0.00	
7.99	32199	0.0	0	0.00	
8.35	86800	40.8	816	8.16	BROMOMETHANE
8.61	510242	55.4	1107	11.07	CHLOROETHANE
9.51	595548	48.9	977	9.77	TCFM
10.10	41715	0.0	0	0.00	
10.54	13315	0.0	0	0.00	
10.73	26894	0.0	0	0.00	
11.39	378867	45.3	907	9.07	FREON 113
12.20	668308	55.2	1105	11.05	1,1-DCE
13.51	29444	0.0	0	0.00	
13.72	15597	0.0	0	0.00	
13.97	13643	0.0	0	0.00	
14.18	20433	0.0	0	0.00	
14.51	14462	0.0	0	0.00	
15.06	889815	55.4	1108	11.08	METH CHLORIDE
15.88	29208	0.0	0	0.00	
16.22	23008	0.0	0	0.00	
16.80	597037	54.1	1082	10.82	TRANS 1,2-DCE
17.73	20032	0.0	0	0.00	
17.97	36246	0.0	0	0.00	
18.48	8402	0.0	0	0.00	
18.71	35027	0.0	0	0.00	
19.23	6153	0.0	0	0.00	
19.37	16879	0.0	0	0.00	
20.19	585862	56.4	1129	11.29	1,1-DCA
20.83	25035	0.0	0	0.00	
21.15	10294	0.0	0	0.00	
21.28	14427	0.0	0	0.00	
21.55	16083	0.0	0	0.00	
21.77	21273	0.0	0	0.00	
22.14	28511	0.0	0	0.00	
22.68	18728	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.17
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : CTL VOA 1
 Acquired : May 28, 1996 13:13:10
 Printed : May 29, 1996 16:43:46

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
22.88	13121	0.0	0	0.00	
23.23	20115	0.0	0	0.00	
23.47	10334	0.0	0	0.00	
23.74	13249	0.0	0	0.00	
24.28	273124	43.9	877	8.77	2,2-DCPA
24.67	610316	51.9	1037	10.37	CIS 1,2-DCE
25.73	703786	52.3	1046	10.46	CHLOROFORM
26.75	332255	45.5	910	9.10	BCM
27.96	577037	50.3	1006	10.06	1,1,1-TCA
28.91	377023	48.1	962	9.62	1,1-DCPE
29.32	465976	47.2	944	9.44	CARBON TET
30.24	1297	0.0	0	0.00	
30.64	532438	49.9	997	9.97	1,2-DCA
31.75	45044	0.0	0	0.00	
32.34	60758	42.6	852	8.52	2-CL ETH VI ETH
32.84	11739	0.0	0	0.00	
33.16	8212	0.0	0	0.00	
33.68	676954	53.7	1074	10.74	TCE
34.70	492847	53.6	1071	10.71	1,2-DCPA
35.07	12913	0.0	0	0.00	
35.20	11513	0.0	0	0.00	
35.46	4361	0.0	0	0.00	
35.85	337930	48.2	964	9.64	BRDCLMETHANE
36.07	267688	47.9	958	9.58	DIBROMOMETHANE
36.46	31553	0.0	0	0.00	
37.23	4622	0.0	0	0.00	
37.60	8986	0.0	0	0.00	
37.81	4670	0.0	0	0.00	
38.05	2860	0.0	0	0.00	
38.48	471526	56.4	1127	11.27	CIS 1,3-DCPE
39.35	7099	0.0	0	0.00	
39.65	3497	0.0	0	0.00	
39.95	2086	0.0	0	0.00	
40.14	2365	0.0	0	0.00	
40.43	3152	0.0	0	0.00	
40.52	1801	0.0	0	0.00	
40.83	289632	44.7	893	8.93	TRANS 1,3-DCPE
41.46	585322	52.3	1046	10.46	1,1,2-TCA
42.56	1162859	100.3	2005	20.05	1,3 DCPA/PCE
43.61	240084	45.7	914	9.14	DIBRCLMETHANE
44.45	195863	48.6	973	9.73	1,2-DBEA(EDB)
45.25	8321	0.0	0	0.00	
45.66	387146	521.6	10432	104.32	1CL4FBZ (SURR) 104
46.19	221193	49.8	995	9.95	CHLOROBENZENE
46.43	599655	49.1	981	9.81	1,1,1,2-PCA
47.21	793997	5.0	100	1.00	1CL2FBZ (IS) OK
48.06	9156	0.0	0	0.00	
48.41	2902	0.0	0	0.00	
48.58	3335	0.0	0	0.00	
48.75	3251	0.0	0	0.00	
49.27	8779	0.0	0	0.00	
49.63	1342	0.0	0	0.00	
50.00	4961	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160527.17
 Method : c:\ezchrom\voatemp\lvoa0527.met
 Sample ID : CTL VOA 1
 Acquired : May 28, 1996 13:13:10
 Printed : May 29, 1996 16:43:46

Channel B Results

RT (min)	pK Area	ng	Scil (µg/kg)	Soln (µg/l)	Compound
50.26	126773	44.1	883	8.83	BROMOFORM
51.03	367142	50.3	1007	10.07	1,1,2,2-PCA
51.64	251941	49.0	979	9.79	1,2,3-TCPA
52.01	122561	45.1	901	9.01	BROMOBENZENE
52.56	190836	49.3	986	9.86	2-CL TOLUENE
52.78	268248	55.5	1111	11.11	4-CL TOLUENE
53.65	1979	0.0	0	0.00	
53.84	5697	0.0	0	0.00	
54.27	2913	0.0	0	0.00	
54.49	3548	0.0	0	0.00	
54.87	718	0.0	0	0.00	
55.14	835	0.0	0	0.00	
55.36	722	0.0	0	0.00	
55.61	1395	0.0	0	0.00	
55.89	300038	45.9	919	9.19	1,3-DCB
56.37	361016	46.6	932	9.32	1,4-DCB
57.15	1928	0.0	0	0.00	
57.34	3202	0.0	0	0.00	
57.94	345787	52.5	1050	10.50	1,2-DCB
58.73	1484	0.0	0	0.00	
59.17	724	0.0	0	0.00	
59.43	1346	0.0	0	0.00	
59.80	1746	0.0	0	0.00	
59.99	1648	0.0	0	0.00	
60.59	2564	0.0	0	0.00	
61.25	39369	44.5	891	8.91	1,2-DBr-3-CPA
61.58	6194	0.0	0	0.00	
62.16	2177	0.0	0	0.00	
62.33	1835	0.0	0	0.00	
62.73	3946	0.0	0	0.00	
63.43	1087	0.0	0	0.00	
63.70	1932	0.0	0	0.00	
63.97	1568	0.0	0	0.00	
64.21	289095	56.6	1133	11.33	1,2,4-TCB
64.65	505257	69.1	1382	13.82	OK INCL HEXACL BUTADIENE
65.44	5559	0.0	0	0.00	
65.79	259530	56.3	1127	11.27	1,2,3-TCB
66.46	3411	0.0	0	0.00	
66.63	3644	0.0	0	0.00	
66.83	1391	0.0	0	0.00	

MUN 31 MAY 96

AG 31 MAY 96

Chain of Custody

DATE 5/28/96 PAGE 1 of 2

PROJECT MANAGER: Donald Hanson
 COMPANY: Harding Lawson Associates
 ADDRESS: 2800 N. 44th St. #500
Phoenix AZ 85008
 BILL TO: SAME AS ABOVE to Donald Hanson
 COMPANY: _____
 ADDRESS: _____

ANALYSIS REQUEST

Chris Colbert
 SAMPLES (Signature) FAX NUMBER 224-0844 PHONE NUMBER _____

SAMPLE ID	PREP	TYPE OF CONTAINER	DATE	TIME	MATRIX	LAB ID
B-2-65	Ice Methanol	Amber	5/24/96	1427	Soil	5047
B-2-70	Ice Methanol	Amber	5/24/96	1515	Soil	5048
B-2-75	Ice Methanol	Amber	5/24/96	1625	Soil	5049
B-2-80	Ice Methanol	Amber	5/24/96	1648	Soil	5050
B-2-85	Ice Methanol	Amber	5/24/96	1656	Soil	5051
B-2-90	Ice Methanol	Amber	5/24/96	1725	Soil	5052
B-2-90ms	Ice Methanol	Amber	5/24/96	1705	Soil	5053
B-2-90SD	Ice Methanol	Amber	5/24/96	1705	Soil	5054
EW-FB2	Ice Methanol	Amber	5/21/96	1905	Soil	5055

Petroleum Hydrocarbons (418.1 / 418.1 AZ)	BTXE (8021)	Chlorinated Hydrocarbons (601/8021)	Aromatic Hydrocarbons (602/8021)	Organochlorine Pesticides (608/8081)	Chlorinated Herbicides (615/8151)	Organophosphate Pesticides (614/8141)	Semi-Volatile Organics GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	SDWA Primary Standards	SDWA Secondary Standards	SDWA Volatiles (502.1/503.1/502.2)	The 13 Priority Pollutant Metals	The 8 RCRA Metals by TCLP (1311)	NUMBER OF CONTAINERS
X	X	X	X											
X	X	X	X											
X	X	X	X											
X	X	X	X											
X	X	X	X											
X	X	X	X											
X	X	X	X											
X	X	X	X											
X	X	X	X											
X	X	X	X											

PROJECT INFORMATION
 PROJECT NO: 34529-6.1
 PROJECT NAME: Estes
 P.O. NO.: 34529-6.1
 SHIPPED VIA: HLA
 SAMPLE DISPOSAL INSTRUCTIONS:
 MCKENZIE RETURN
 PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS
 TAT: (NORMAL) (RUSH) 24 48 72 1 WEEK
 Comments: The samples were stored in the jan refrigerator on 5/24/96. A custody seal was placed on the door. This seal was unbroken on 5/28/96 when the were removed by C. Colbertson, Level 4 QC.

SAMPLE RECEIPT
 TOTAL NO. OF CONTAINERS: 109
 CHAIN OF CUSTODY SEALS: YCS
 RECEIVED INTACT: YCS
 TEMPERATURE: AMBIENT/COLD
 ICE: PRESENT / ABSENT
WEE / BLUE

RELINQUISHED BY: 1.
 Signature: Chris Colbertson Time: 1927
 Printed Name: Christian Colbertson Date: 5/24/96
 Company: Harding Lawson Associates
RECEIVED BY: 1.
 Signature: _____ Time: 1927
 Printed Name: HLA Storage Date: 5/24/96
 Company: _____

RELINQUISHED BY: 2.
 Signature: _____ Time: 1322
 Printed Name: HLA Storage Date: 5/28/96
 Company: _____
RECEIVED BY: 2.
 Signature: Chris Colbertson Time: 1322
 Printed Name: Christian Colbertson Date: 5/28/96
 Company: Harding Lawson Associates

RELINQUISHED BY: 3.
 Signature: Chris Colbertson Time: 1445
 Printed Name: Christian Colbertson Date: 28 MAY 96
 Company: HLA
RECEIVED BY: 3.
 Signature: Pete Prescott Time: 1445
 Printed Name: Pete Prescott Date: 28 MAY 96
 Company: M. Kenzie

ERROR CODES

<u>Error Code</u>	<u>Explanation of Correction</u>
A	Primary Data Incorrectly Recorded
T	Transcription Error
E	Entry Error
D	Date/Time Incorrectly Recorded
P	Peak Height Incorrectly Measured
SC	Standard Curve Misread
C	Calculation Error
SF	Significant Figures Incorrect
R	Rounding Error
W	Write-over
I	Illegible Data
SP	Spelling Error
AE	Automated Entry Error
EC	Entry Completed

ABBREVIATIONS

Addl Cmpds	Additional compounds
a.r.	Area Ratio = area of compound / area of I.S.
BS/BSD	Blank spike/Blank spike duplicate
CHK	Check
CHK VOA	Secondary Source Volatile Standard
COC	Chain of Custody
CTL	Control
CTL VOA	Primary Source Volatile Standard
DCM	Methylene Chloride (Dichloromethane)
FB	Fluorobenzene response on Hall detector
H-ok	Hall response for this compound is acceptable to use
Int	Integration (poor integration)
I.S.	Internal Standard
jk pk	Junk peak
KD	Kuderna-Danish: glassware setup
MDL	Minimum Detection Limit
MeCl ₂	Methylene Chloride
MeOH	Methanol
MRL	Minimum Reporting Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
Mthd Blk	Method Blank
N-Evap	Micro-evaporation apparatus
N/A or NA	Not applicable
NC	Not confirmed (either on the other column or other detector)
ND	Not detected
NM	Non method
No-H	No Hall response for this compound
NOO	Not on original
NOR	Not on repeat
NP	Not printed
OOC	Out of Control Event Form
PK	Peak
pk shp	peak shape (bad peak shape)
RRT	Relative Retention Time (incorrect relative retention time)
RT	Retention Time
Spk	Spike
Std dev	Standard deviation
UNK	Unknown
Use PID	Report the compound from the PID detector
WIL	Within Limits

VOLATILE STANDARDS PREPARATION LOG

STANDARD NAME: ESW 0523

PREPARATION DATE: 23 May 96

NO. OF VIALS: 20

PREPARED BY: CT

FINAL VOLUME: 50mls

SOLVENT: MeOH

TYPE: External Surrogate

MIX/COMPOUND	SUPPLIER	DATE REC'D	LOT #	MIX CONC (ug/ml)	VOL USED (ul)	WEIGHT USED (g)	FINAL CONC (ug/ml)
<u>1-chloro-4-fluoro benzene</u>	<u>Restek</u>	<u>15 Mar 96</u>	<u>A006150</u>	<u>2500 ug/ml</u>	<u>400</u>	<u>N/A</u>	<u>20.0</u>
<u>CT</u> <u>23 May 96</u>							

USE/COMMENTS:
To be used in all water samples.

VOLATILE STANDARDS PREPARATION LOG

STANDARD NAME: IS 0523

PREPARATION DATE: 23 May 96

NO. OF VIALS: 30

PREPARED BY: CT

FINAL VOLUME: 100mls

SOLVENT: MeOH

TYPE: Internal standard surrogate

MIX/COMPOUND	SUPPLIER	DATE REC'D	LOT #	MIX CONC (ug/ml)	VOL USED (ul)	WEIGHT USED (g)	FINAL CONC (ug/ml)
Fluorobenzene Mix	Restek	14 May 96	A006057	2000	2000	NA	40.0
502.2 Int. Std Mix	Restek	14 May 96	A004923	2000	2000	NA	40.0
Fluorobenzene							

* @ 23 May 96

30
CT

USE/COMMENTS:
 Daily internal standard surrogate

VOLATILE STANDARDS PREPARATION LOG

STANDARD NAME: VOAPOS23PREPARATION DATE: 23 May 96NO. OF VIALS: 11PREPARED BY: CTFINAL VOLUME: 100mlsSOLVENT: MeOHTYPE: Primary Standard

MIX/COMPOUND	SUPPLIER	DATE REC'D	LOT #	MIX CONC (ug/ml)	VOL USED (ul)	WEIGHT USED (g)	FINAL CONC (ug/ml)
502.2 Calib. mix #1	Restek	14 May 96	A006522	2000	500	N/A	10.0
#2		17 May 96	A006564				
#3		17 May 96	A006096				
#4		17 May 96	A006056				
#5		17 May 96	A006563				
#6		14 Feb 96	A005576				
2-ethylhexyl ether	Supelco	14 May 96	* * * L53856	5000	200		
MTBE	absolute standards	16 Apr 96	100395	1000	1000		
Freon 113			032996	1000	1000		
1-chloro-4-fluoro-benzene	Restek	15 May 96	A006150	2500	800		20.0

© CT 23 May 96
* no receiptal date

CT
23 May 96

USE/COMMENTS:

Calibration and daily etc VOA standard

VOLATILE STANDARDS PREPARATION LOG

STANDARD NAME: VOAS0523

PREPARATION DATE: 23 May 96

NO. OF VIALS: 11

PREPARED BY: U

FINAL VOLUME: 100 ml

SOLVENT: MeOH

TYPE: Secondary Standard

MIX/COMPOUND	SUPPLIER	DATE REC'D	LOT #	MIX CONC (ug/ml)	VOL USED (ul)	WEIGHT USED (g)	FINAL CONC (ug/ml)
VOA mix 100	NSI	15 Apr 96	C-139-05	2000	500	NA	10.0
VOA mix 200		15 Apr 96	C-134-01	↓	500		
VOA mix 300A		12 Mar 96	C-137-02	1000	1000		
VOA mix 300B		12 Mar 96	C-135-01	↓	1000		
VOA mix 400		15 Apr 96	C-140-01	2000	500		
VOA mix 500		15 Apr 96	C-133-01	↓	500		
VOA mix 600		15 Apr 96	C-138-01	↓	500		
2-chloro-4-hydroxybenzene	↓	12 Apr 96	12-04-01	1000	1000		
MTBE	chem service	13 Mar 96	156-146B	2000	500		
Freon 113	↓	26 Jul 95	144-50A	20000	50		↓
1-chloro-4-fluoro benzene	Restek	15 Mar 96	A006130	2500	800	↓	20.0

U
23 May 96

USE/COMMENTS: Daily CHE standard

Volatiles Instrument 1 Run Log

CTL STD VOAP 1523-3 10.0 µg/ml
 CHK STD VOAS 0523-3
 Mtx Spk CTL STD
 INT STD 2015 0523-05 40.0 µg/ml
 EXT SURR ESW 0523-04 20.0 µg/ml

Analyst: MJM/CT/TDF Date 03 Jun 96
 Printed TH/TDF Date 04 Jun 96/05 Jun 96
 Onto Network TH/TDF Date 05 Jun 96
 Method Used IV0A0527.mer/IV0A0603.mer
 Batch Used 0603I1
 #E MJM 03 Jun 96

Data File Number	SP#	Sample ID	Aliquot	Client ID	Method	Comments	Hnu	pH
160603.01	1	S111a	50 ml	AIR-3-I-89	5022(5)AIR	✓		
02	2	S112a		AIR-3-B-89		✓		
03	3	S113a		AIR-3-T-89		✓		
04	4	S186a		AIR-3-I-90		✓ x2 mSurr		
05	5	S187a		AIR-3-B-90		✓		
06	6	S188a		AIR-3-T-90		✓		
07	7	MTHD BLK a			All			
08	8	0.4 ppb	2.0 µl					
09	9	0.5 ppb	2.5 µl					
10	10	1.0 ppb	5.0 µl					
11	11	5.0 ppb	25 µl					
12	12	10.0 ppb	50 µl					
13	13	25.0 ppb	12.5 µl					
14	14	50.0 ppb	25.0 µl					
15	15	CHK BLK	5.0 µl			Not printed		
16	16	MTHD BLK w				✓		
17	1	2.0000	10 µl			x10 dil ✓		
18	2	CHK VOA	5.0 µl			✓		
5111-13(3) 5186-8(3) 2	19	3	5.0 ml	All		✓		
20	4	Blk SPK DuWa				✓		
21	5	CTL VOA	5.0 µl			✓		

MJM 03 Jun 96

INTERNAL STANDARD WORKSHEET

METHOD: All Volatiles
 DATE: ~~05 Jun 96~~
03 Jun 96

INSTRUMENT: 1
 OPERATOR: TDF/KL/UT/CT/TH

STANDARD CONC. (ppb)	PID DETECTOR FLUOROBENZENE	PID DETECTOR 1-CHLORO-2-FLUOROBENZENE	HALL (ELCD) DETECTOR 1-CHLORO-2-FLUOROBENZENE
	RESPONSE AREA	RESPONSE AREA	RESPONSE AREA
<u>0.4</u> ✓	<u>1007246</u> ✓	<u>974801</u> ✓	<u>700752</u> ✓
<u>0.5</u> ✓	<u>1013472</u> ✓	<u>900664</u> ✓	<u>578365</u> ✓
<u>1.0</u> ✓	<u>995578</u> ✓	<u>973729</u> ✓	<u>719552</u> ✓
<u>5.0</u> ✓	<u>1002620</u> ✓	<u>988076</u> ✓	<u>833755</u> ✓
<u>10.0</u> ✓	<u>982987</u> ✓	<u>969072</u> ✓	<u>913170</u> ✓
<u>25.0</u> ✓	<u>1015904</u> ✓	<u>1026493</u> ✓	<u>927730</u> ✓
<u>50.0</u> ✓	<u>985701</u> ✓	<u>1073223</u> ✓	<u>898157</u> ✓
MEAN	<u>1000501</u> ✓	<u>986580</u> ✓	<u>795926</u> ✓
UPPER LIMIT (130%)	<u>1300651</u> ✓	<u>1282554</u> ✓	<u>1034704</u> ✓
LOWER LIMIT (70%)	<u>700351</u> ✓	<u>690606</u> ✓	<u>557148</u> ✓
Std. Dev.	<u>N/A</u>	<u>49417</u> ✓	<u>122605</u> ✓
+ 3 Std. Dev.	<u>N/A</u>	<u>1134831</u> ✓ (115%)	<u>1163741</u> ✓ (146%)
- 3 Std. Dev.	<u>N/A</u>	<u>838329</u> ✓ (85%)	<u>428111</u> ✓ (54%)

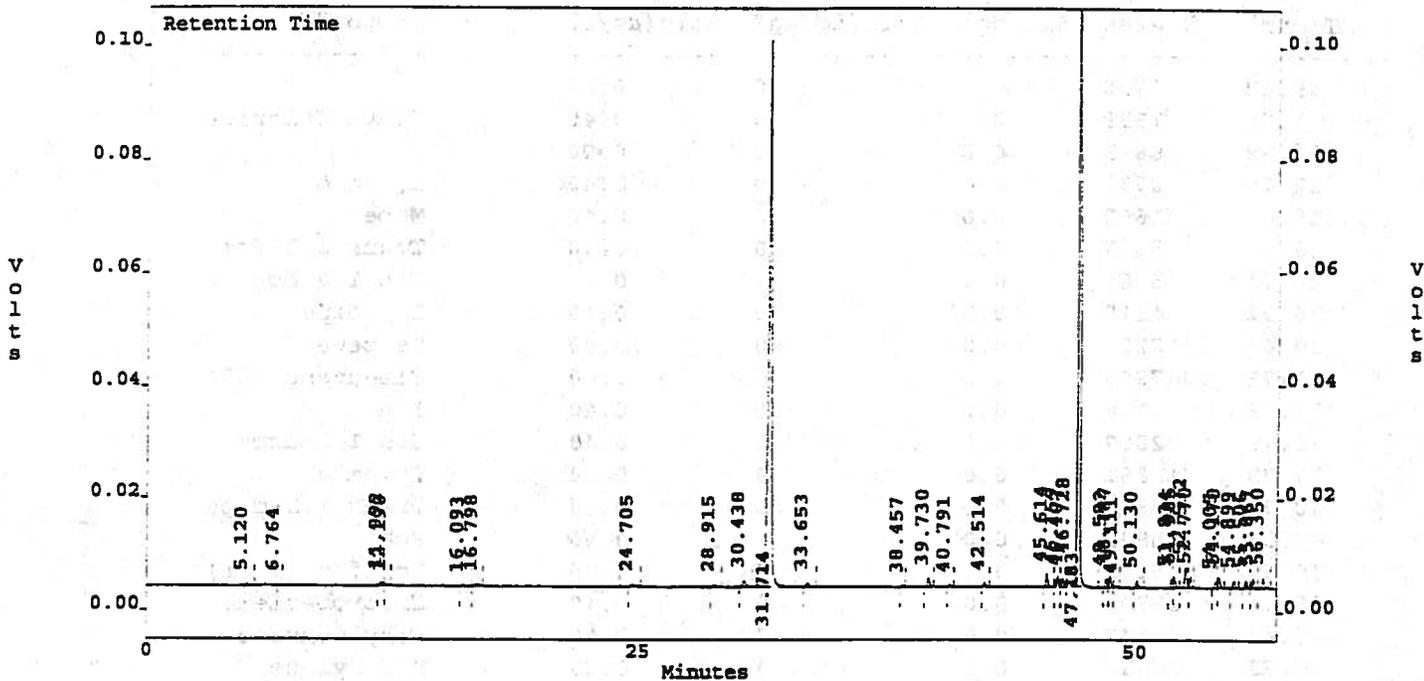
Comments:

Initials TDF Date 05 Jun 96

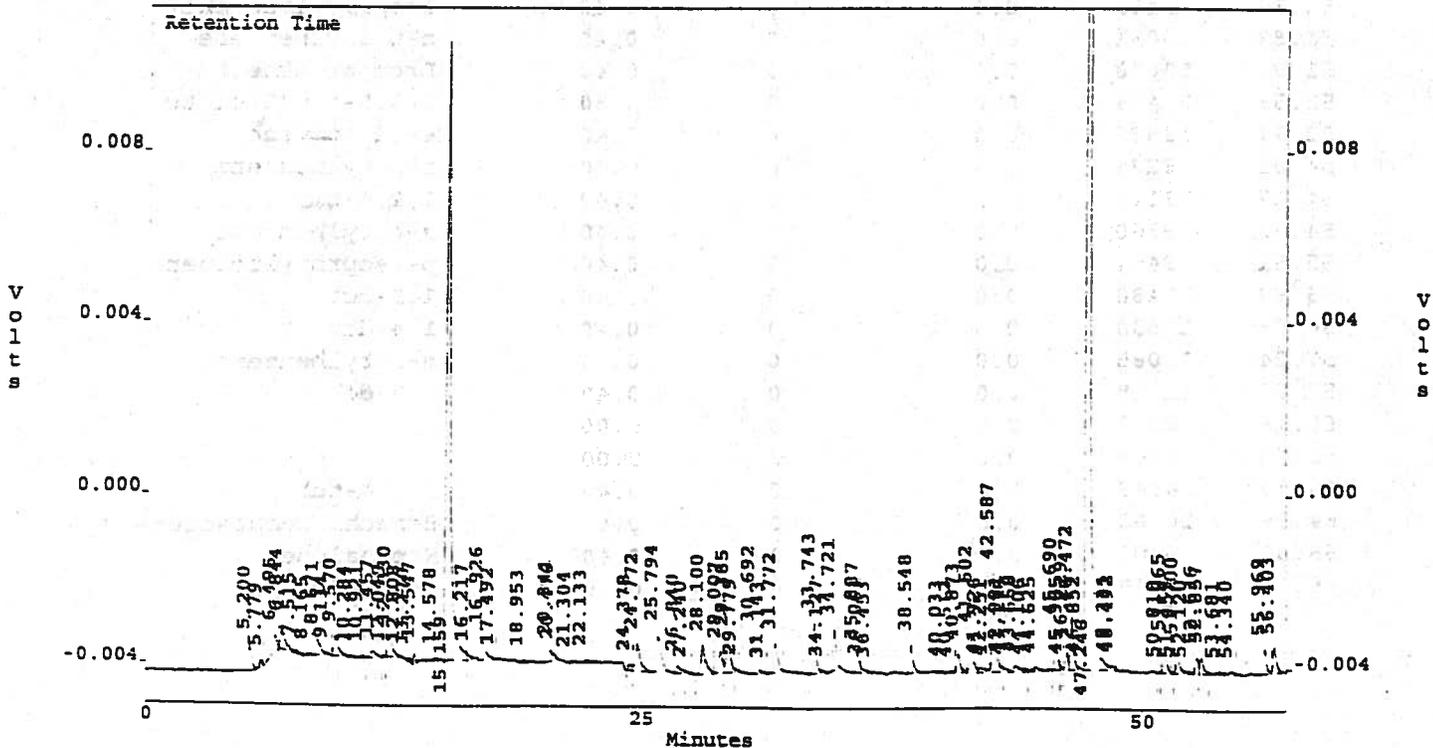
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.08
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 0.4 ppb 8
 Acquired : Jun 03, 1996 21:46:50
 Printed : Jun 04, 1996 16:19:44

c:\ezchrom\data\160603.08 -- Channel A



c:\ezchrom\data\160603.08 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.08
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 0.4 ppb 8
 Acquired : Jun 03, 1996 21:46:50
 Printed : Jun 04, 1996 16:19:50

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil($\mu\text{g}/\text{kg}$)	Soln($\mu\text{g}/\text{L}$)	Compound
5.12	2730	0.0	0	0.00	
6.76	1139	0.0	0	0.40	Vinyl Chloride
11.99	6843	0.0	0	0.00	
12.19	2736	0.0	0	0.40	1,1-dce
16.09	1662	0.0	0	0.40	Mtbe
16.80	5477	0.0	0	0.40	Trans 1,2-dce
24.71	5268	0.0	0	0.40	Cis 1,2-dce
28.92	4149	0.0	0	0.40	1,1-dcpe
30.44	12219	0.0	0	0.40	Benzene
31.71	1007246	0.0	0	1.00	Flbenzene (IS)
33.65	7104	0.0	0	0.40	Tce
38.46	2007	0.0	0	0.40	Cis 1,3-dcpe
39.73	12381	0.0	0	0.40	Toluene
40.79	2819	0.0	0	0.40	Trans 1,3-dcpe
42.51	5899	0.0	0	0.40	Pce
45.61	15393	0.0	0	4.00	1cl4fbz (surr)
46.16	12707	0.0	0	0.40	Chlorobenzene
46.41	11147	0.0	0	0.40	Ethylbenzene
46.73	26632	0.0	0	0.80	M/P Xylene
47.18	974801	0.0	0	1.00	1cl2flbz (IS)
48.58	10563	0.0	0	0.40	O Xylene
48.79	13866	0.0	0	0.40	Styrene
49.11	2427	0.0	0	0.00	
50.13	9409	0.0	0	0.40	Isopropylbenzene
51.83	10091	0.0	0	0.40	n-propylbenzene
51.99	13028	0.0	0	0.40	Bromobenzene
52.53	27414	0.0	0	0.80	1,3,5-tmb/2-cl tol
52.77	12586	0.0	0	0.40	4-cl toluene
54.01	8224	0.0	0	0.40	t-butylbenzene
54.17	13148	0.0	0	0.40	1,2,4-tmb
54.90	9360	0.0	0	0.40	s-butylbenzene
55.51	9464	0.0	0	0.40	p-isopropyltoluene
55.87	11480	0.0	0	0.40	1,3-dcb
56.35	14838	0.0	0	0.40	1,4-dcb
57.24	11085	0.0	0	0.40	n-butylbenzene
57.90	11048	0.0	0	0.40	1,2-dcb
60.16	2295	0.0	0	0.00	
63.28	1144	0.0	0	0.00	
64.17	4949	0.0	0	0.40	1,2,4-tcb
64.59	10760	0.0	0	0.40	Hexachlorobutadiene
65.00	9495	0.0	0	0.40	Napthalene
65.74	4879	0.0	0	0.40	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.08
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 0.4 ppb 8
 Acquired : Jun 03, 1996 21:46:50
 Printed : Jun 04, 1996 16:19:51

Channel B Results

RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
5.20	6636	0.0	0	0.00	
5.78	1470	0.0	0	0.40	DCDFM
6.49	4724	0.0	0	0.40	CHLOROMETHANE
6.84	7622	0.0	0	0.40	VINYL CHLORIDE
7.51	1398	0.0	0	0.00	
8.17	1107	0.0	0	0.00	
8.67	5169	0.0	0	0.00	
9.13	444	0.0	0	0.00	
9.57	6671	0.0	0	0.40	TCFM
10.28	696	0.0	0	0.00	
10.92	262	0.0	0	0.00	
11.46	3511	0.0	0	0.40	FREON 113
12.05	349	0.0	0	0.40	1,1-DCE
12.33	6784	0.0	0	0.00	
12.81	649	0.0	0	0.00	
13.27	911	0.0	0	0.00	
13.55	1594	0.0	0	0.00	
14.58	637	0.0	0	0.00	
15.16	212115	0.0	0	0.40	METH CHLORIDE
16.22	1420	0.0	0	0.00	
16.93	11253	0.0	0	0.40	TRANS 1,2-DCE
17.49	374	0.0	0	0.00	
18.95	1005	0.0	0	0.00	
20.34	3153	0.0	0	0.40	1,1-DCA
20.48	1820	0.0	0	0.00	
21.30	278	0.0	0	0.00	
22.13	1101	0.0	0	0.00	
24.38	1783	0.0	0	0.40	2,2-DCPA
24.77	10332	0.0	0	0.40	CIS 1,2-DCE
25.79	14318	0.0	0	0.40	CHLOROFORM
26.84	3151	0.0	0	0.40	BCM
27.24	831	0.0	0	0.00	
28.10	12228	0.0	0	0.40	1,1,1-TCA
29.01	6989	0.0	0	0.40	1,1-DCPE
29.38	11835	0.0	0	0.40	CARBON TET
29.78	732	0.0	0	0.00	
30.69	10255	0.0	0	0.40	1,2-DCA
31.14	685	0.0	0	0.00	
31.77	10914	0.0	0	0.00	
33.74	12731	0.0	0	0.40	TCE
34.13	979	0.0	0	0.00	
34.72	10063	0.0	0	0.40	1,2-DCPA
35.89	4352	0.0	0	0.40	BRDICLMETHANE
36.06	1601	0.0	0	0.40	DIBROMOMETHANE
36.45	488	0.0	0	0.00	

Continued...

File : c:\ezchrom\data1\160603.08
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 0.4 ppb 8
 Acquired : Jun 03, 1996 21:46:50
 Printed : Jun 04, 1996 16:19:51

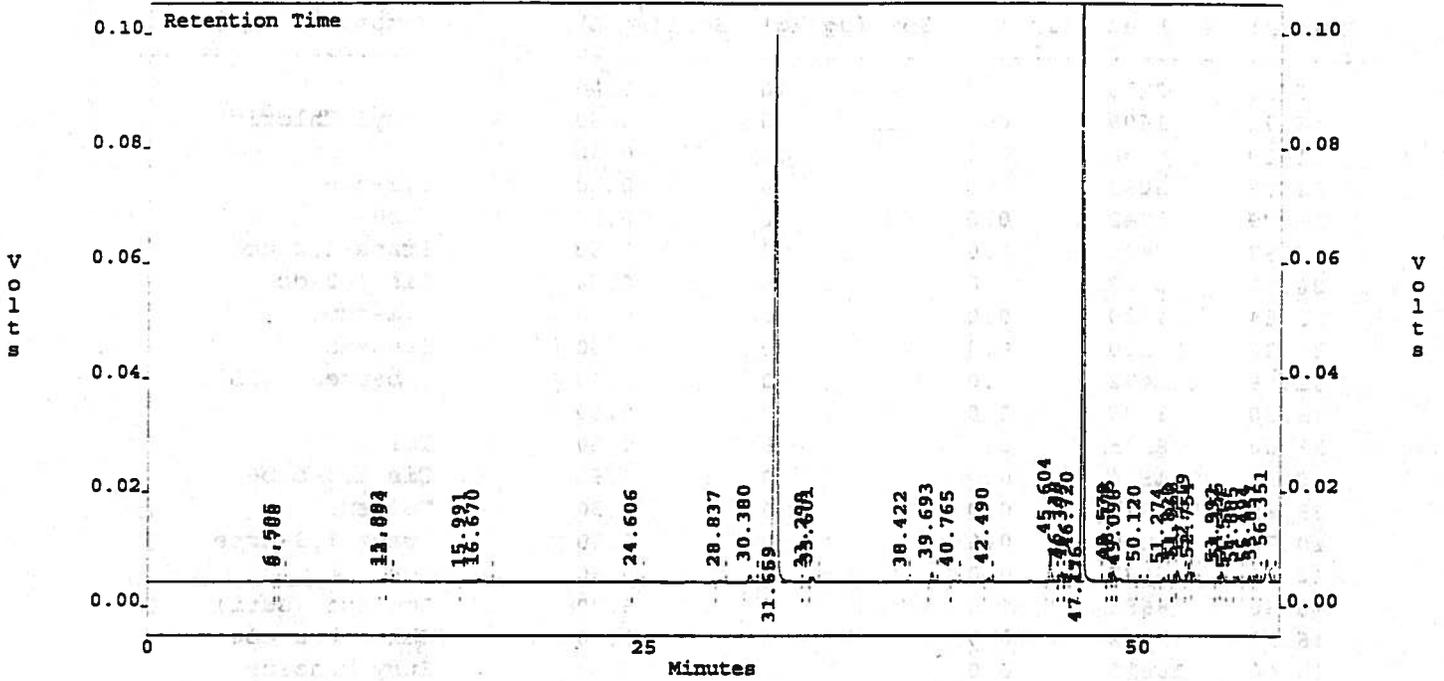
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
38.55	7362	0.0	0	0.40	CIS 1,3-DCPE
40.03	594	0.0	0	0.00	
40.51	814	0.0	0	0.00	
40.87	5094	0.0	0	0.40	TRANS 1,3-DCPE
41.50	9508	0.0	0	0.40	1,1,2-TCA
41.93	2079	0.0	0	0.00	
42.25	613	0.0	0	0.00	
42.59	23761	0.0	0	0.80	1,3 DCPA/PCE
42.98	1078	0.0	0	0.00	
43.18	965	0.0	0	0.00	
43.66	3085	0.0	0	0.40	DIBRCLMETHANE
44.11	921	0.0	0	0.00	
44.63	2055	0.0	0	0.00	
45.69	8656	0.0	0	4.00	1CL4FBZ (SURRE)
45.96	306	0.0	0	0.00	
46.23	3108	0.0	0	0.40	CHLOROBENZENE
46.47	12086	0.0	0	0.40	1,1,1,2-PCA
46.85	668	0.0	0	0.00	
47.25	700752	0.0	0	1.00	1CL2FBZ (IS)
48.33	742	0.0	0	0.00	
48.49	1222	0.0	0	0.00	
50.81	244	0.0	0	0.00	
51.06	6677	0.0	0	0.40	1,1,2,2-PCA
51.46	367	0.0	0	0.00	
51.70	5955	0.0	0	0.40	1,2,3-TCPA
52.12	1162	0.0	0	0.40	BROMOBENZENE
52.64	3239	0.0	0	0.40	2-CL TOLUENE
52.86	4833	0.0	0	0.40	4-CL TOLUENE
53.68	1390	0.0	0	0.00	
54.34	1172	0.0	0	0.00	
55.97	6041	0.0	0	0.40	1,3-DCB
56.40	6438	0.0	0	0.40	1,4-DCB
57.98	7386	0.0	0	0.40	1,2-DCB
60.99	260	0.0	0	0.00	
61.32	323	0.0	0	0.40	1,2-DBr-3-CPA
63.75	487	0.0	0	0.00	
64.25	5152	0.0	0	0.40	1,2,4-TCB
64.65	38355	0.0	0	0.40	HEXACLBUTADIENE
65.13	1746	0.0	0	0.00	
65.81	5894	0.0	0	0.40	1,2,3-TCB
67.36	220	0.0	0	0.00	

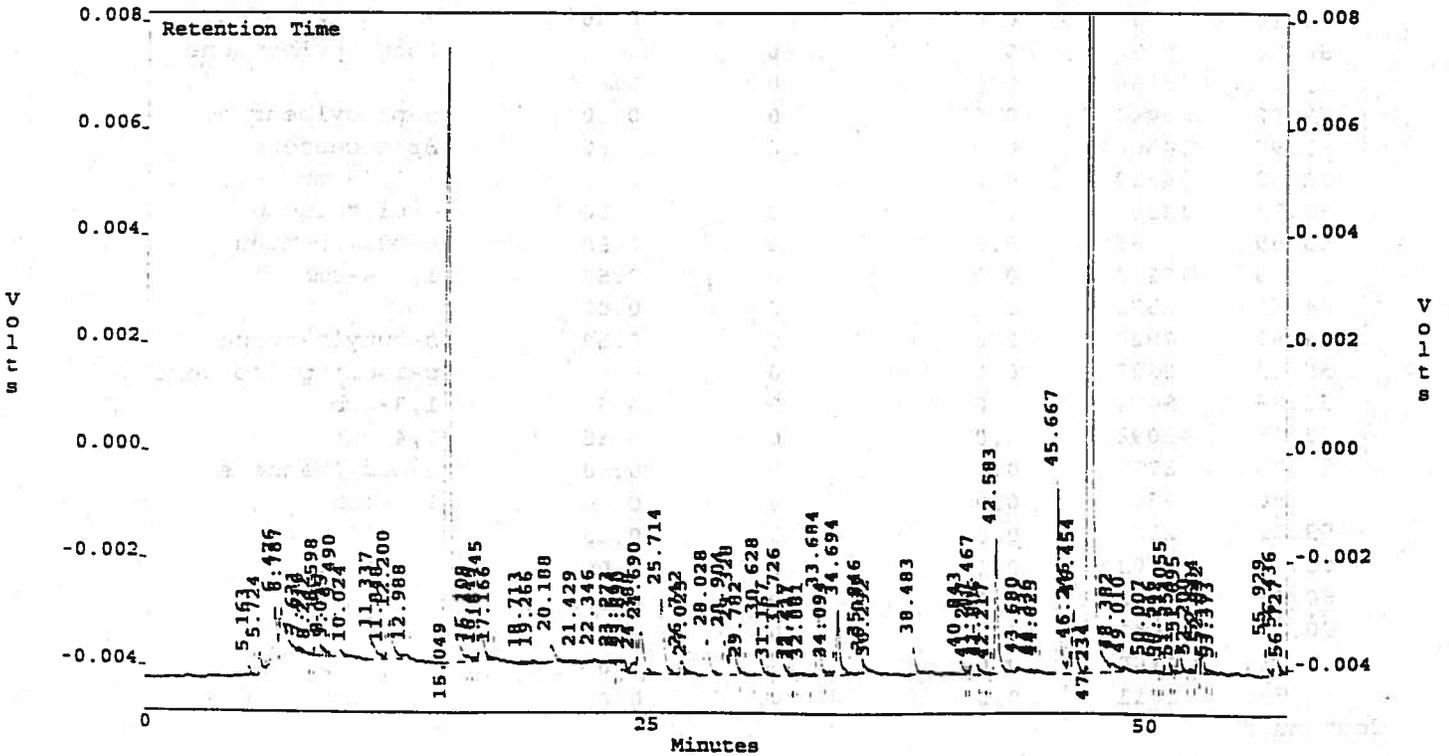
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.09
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:16

c:\ezchrom\data\160603.09 -- Channel A



c:\ezchrom\data\160603.09 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.09
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:23

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
6.50	2150	0.0	0	0.00	
6.71	1699	0.0	0	0.50	Vinyl Chloride
11.89	4730	0.0	0	0.00	
12.09	3092	0.0	0	0.50	1,1-dce
15.99	2242	0.0	0	0.50	Mtbe
16.67	7678	0.0	0	0.50	Trans 1,2-dce
24.61	6207	0.0	0	0.50	Cis 1,2-dce
28.84	4620	0.0	0	0.50	1,1-dcpe
30.38	14170	0.0	0	0.50	Benzene
31.66	1013472	0.0	0	1.00	Flbenzene (IS)
33.30	1308	0.0	0	0.00	
33.60	8335	0.0	0	0.50	Tce
38.42	1574	0.0	0	0.50	Cis 1,3-dcpe
39.69	12947	0.0	0	0.50	Toluene
40.76	2210	0.0	0	0.50	Trans 1,3-dcpe
42.49	5605	0.0	0	0.50	Pce
45.60	38683	0.0	0	5.00	1cl4fbz (surr)
46.15	12972	0.0	0	0.50	Chlorobenzene
46.40	10827	0.0	0	0.50	Ethylbenzene
46.72	25042	0.0	0	1.00	M/P Xylene
47.18	900664	0.0	0	1.00	1cl2flbz (IS)
48.57	10393	0.0	0	0.50	O Xylene
48.78	13418	0.0	0	0.50	Styrene
49.10	7578	0.0	0	0.00	
50.12	8470	0.0	0	0.50	Isopropylbenzene
51.27	5366	0.0	0	0.00	
51.82	8440	0.0	0	0.50	n-propylbenzene
51.97	14560	0.0	0	0.50	Bromobenzene
52.52	24610	0.0	0	1.00	1,3,5-tmb/2-cl tol
52.75	12285	0.0	0	0.50	4-cl toluene
53.99	7066	0.0	0	0.50	t-butylbenzene
54.15	12268	0.0	0	0.50	1,2,4-tmb
54.52	1582	0.0	0	0.00	
54.89	7928	0.0	0	0.50	s-butylbenzene
55.49	8225	0.0	0	0.50	p-isopropyltoluene
55.86	9444	0.0	0	0.50	1,3-dcb
56.35	44098	0.0	0	0.50	1,4-dcb
57.25	8717	0.0	0	0.50	n-butylbenzene
57.90	9740	0.0	0	0.50	1,2-dcb
59.21	2187	0.0	0	0.00	
60.19	1503	0.0	0	0.00	
60.48	1442	0.0	0	0.00	
60.79	1641	0.0	0	0.00	
61.60	1160	0.0	0	0.00	
62.73	1611	0.0	0	0.00	

Continued...

File : c:\ezchrom\data\160603.09
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:23

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
63.26	7907	0.0	0	0.00	
64.19	2543	0.0	0	0.50	1,2,4-tcb
64.61	1222	0.0	0	0.50	Hexachlorobutadiene
65.01	3945	0.0	0	0.50	Napthalene
65.60	1251	0.0	0	0.00	
65.75	1177	0.0	0	0.50	1,2,3-tcb
66.81	2034	0.0	0	0.00	
67.27	1204	0.0	0	0.00	

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File : c:\ezchrom\data1\160603.09
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:23

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
5.16	1493	0.0	0	0.00	
5.72	3740	0.0	0	0.50	DCDFM
6.48	12499	0.0	0	0.50	CHLOROMETHANE
6.79	15983	0.0	0	0.50	VINYL CHLORIDE
7.63	858	0.0	0	0.00	
7.92	291	0.0	0	0.00	
8.23	218	0.0	0	0.50	BROMOMETHANE
8.60	8466	0.0	0	0.50	CHLOROETHANE
8.90	1119	0.0	0	0.00	
9.10	532	0.0	0	0.00	
9.49	12338	0.0	0	0.50	TCFM
10.02	222	0.0	0	0.00	
11.34	7348	0.0	0	0.50	FREON 113
11.85	541	0.0	0	0.00	
12.20	11812	0.0	0	0.50	1,1-DCE
12.99	1457	0.0	0	0.00	
15.05	181072	0.0	0	0.50	METH CHLORIDE
16.11	1242	0.0	0	0.00	
16.45	828	0.0	0	0.00	
16.74	7753	0.0	0	0.50	TRANS 1,2-DCE
17.17	769	0.0	0	0.00	
18.71	811	0.0	0	0.00	
19.27	902	0.0	0	0.00	
20.19	5462	0.0	0	0.50	1,1-DCA
21.43	477	0.0	0	0.00	
22.35	1330	0.0	0	0.00	
23.27	613	0.0	0	0.00	
23.54	1657	0.0	0	0.00	
23.89	2025	0.0	0	0.00	
24.39	3234	0.0	0	0.50	2,2-DCPA
24.69	14880	0.0	0	0.50	CIS 1,2-DCE
25.71	20864	0.0	0	0.50	CHLOROFORM
26.74	2621	0.0	0	0.50	BCM
27.02	669	0.0	0	0.00	
28.03	12251	0.0	0	0.50	1,1,1-TCA
28.90	8638	0.0	0	0.50	1,1-DCPE
29.33	13409	0.0	0	0.50	CARBON TET
29.78	695	0.0	0	0.00	
30.63	11125	0.0	0	0.50	1,2-DCA
31.17	487	0.0	0	0.00	
31.73	12308	0.0	0	0.00	
32.22	398	0.0	0	0.00	
32.42	408	0.0	0	0.50	2-CL ETH VI ETH
32.88	888	0.0	0	0.00	
33.68	15624	0.0	0	0.50	TCE

Continued...

File : c:\ezchrom\data\160603.09
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:23

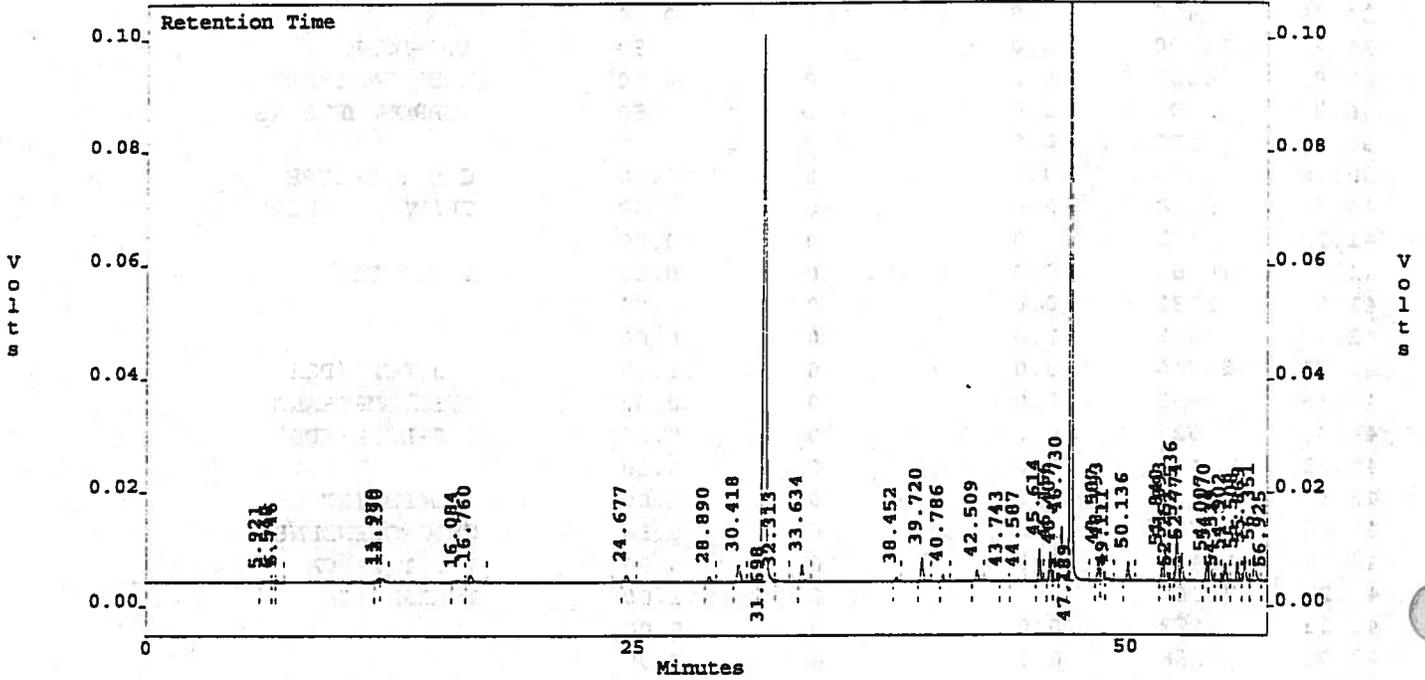
Channel B Results

RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
34.09	1410	0.0	0	0.00	
34.69	14390	0.0	0	0.50	1,2-DCPA
35.85	4302	0.0	0	0.50	BRDICLMETHANE
36.04	1300	0.0	0	0.50	DIBROMOMETHANE
36.29	352	0.0	0	0.00	
38.48	5678	0.0	0	0.50	CIS 1,3-DCPE
40.84	3238	0.0	0	0.50	TRANS 1,3-DCPE
41.22	432	0.0	0	0.00	
41.47	10454	0.0	0	0.50	1,1,2-TCA
41.81	1132	0.0	0	0.00	
42.22	418	0.0	0	0.00	
42.58	26646	0.0	0	1.00	1,3 DCPA/PCE
43.68	495	0.0	0	0.50	DIBRCLMETHANE
44.34	529	0.0	0	0.50	1,2-DBEA (EDB)
44.63	486	0.0	0	0.00	
45.67	32802	0.0	0	5.00	1CL4FBZ (SURR)
46.25	3701	0.0	0	0.50	CHLOROENZENE
46.45	14481	0.0	0	0.50	1,1,1,2-PCA
47.23	578365	0.0	0	1.00	1CL2FBZ (IS)
48.38	3452	0.0	0	0.00	
49.01	868	0.0	0	0.00	
50.01	403	0.0	0	0.00	
50.52	422	0.0	0	0.50	BROMOFORM
50.79	296	0.0	0	0.00	
51.05	7290	0.0	0	0.50	1,1,2,2-PCA
51.35	513	0.0	0	0.00	
51.70	4622	0.0	0	0.50	1,2,3-TCPA
52.20	886	0.0	0	0.50	BROMOBENZENE
52.60	3527	0.0	0	0.50	2-CL TOLUENE
52.84	3600	0.0	0	0.50	4-CL TOLUENE
53.11	945	0.0	0	0.00	
53.37	294	0.0	0	0.00	
55.93	5050	0.0	0	0.50	1,3-DCB
56.44	6155	0.0	0	0.50	1,4-DCB
56.73	619	0.0	0	0.00	
57.98	6512	0.0	0	0.50	1,2-DCB
58.60	691	0.0	0	0.00	
61.77	674	0.0	0	0.50	1,2-DBr-3-CPA
64.35	1320	0.0	0	0.50	1,2,4-TCB
64.67	1702	0.0	0	0.50	HEXACLBUTADIENE
64.89	1112	0.0	0	0.00	
65.31	558	0.0	0	0.00	
65.81	220	0.0	0	0.50	1,2,3-TCB

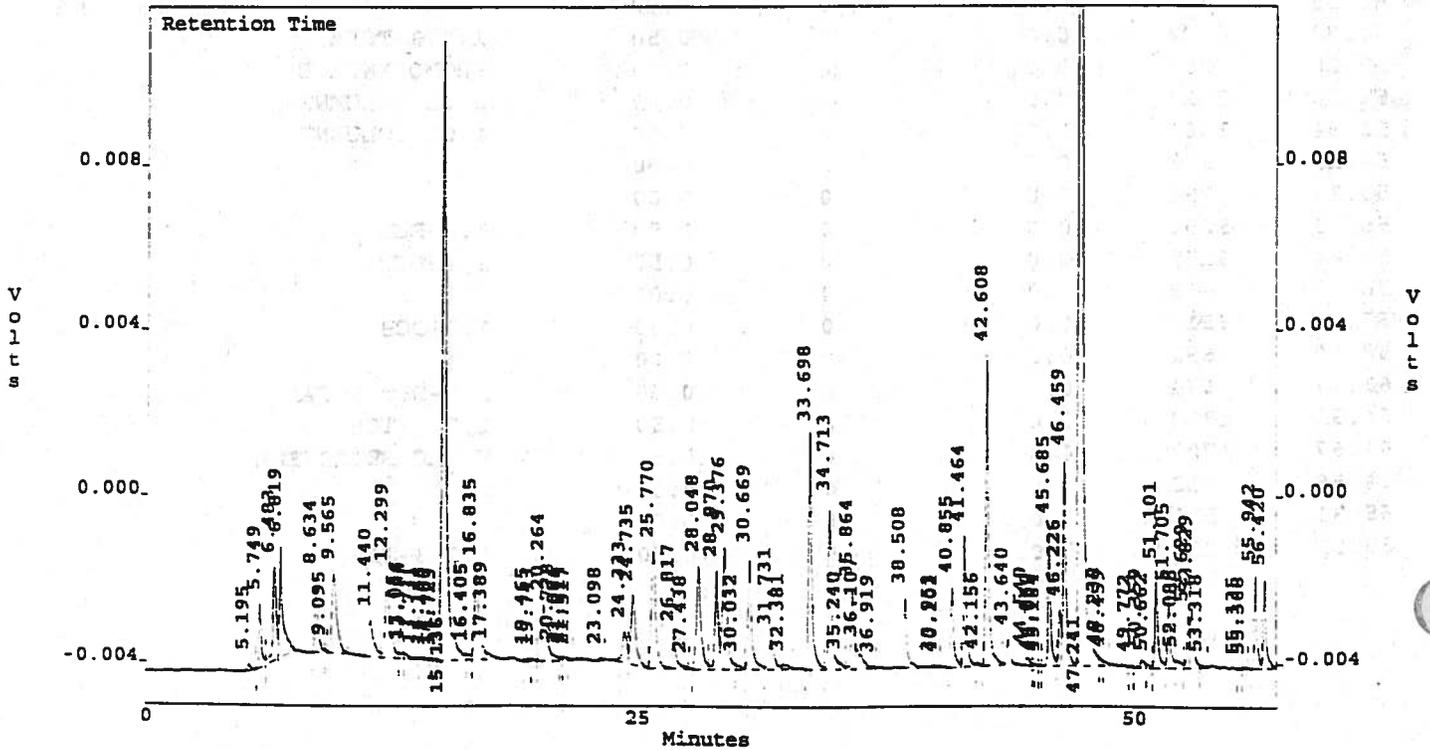
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.10
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 1.0 ppb 10
 Acquired : Jun 04, 1996 00:44:32
 Printed : Jun 04, 1996 16:20:49

c:\ezchrom\data\160603.10 -- Channel A



c:\ezchrom\data\160603.10 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.10
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 1.0 ppb 10
 Acquired : Jun 04, 1996 00:44:32
 Printed : Jun 04, 1996 16:20:55

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
5.92	4640	0.0	0	0.00	
6.55	2064	0.0	0	0.00	
6.75	4139	4.1	83	1.00	Vinyl Chloride
11.98	7089	0.0	0	0.00	
12.19	7952	6.3	126	1.00	1,1-dce
16.08	5879	4.8	95	1.00	Mtbe
16.76	17371	4.1	82	1.00	Trans 1,2-dce
24.68	14430	5.2	103	1.00	Cis 1,2-dce
28.89	11106	6.1	122	1.00	1,1-dcpe
30.42	32747	5.3	106	1.00	Benzene
31.70	995578	5.0	100	1.00	Flbenzene (IS)
32.31	4572	0.0	0	0.00	
33.63	27035	7.2	144	1.00	Tce
38.45	5624	0.0	0	1.00	Cis 1,3-dcpe
39.72	32569	8.2	164	1.00	Toluene
40.79	7684	0.0	0	1.00	Trans 1,3-dcpe
42.51	14896	28.9	579	1.00	Pce
43.74	1210	0.0	0	0.00	
44.59	1485	0.0	0	0.00	
45.61	36210	23.9	479	10.00	1cl4fbz (surr)
46.16	32836	9.6	191	1.00	Chlorobenzene
46.41	29239	17.9	357	1.00	Ethylbenzene
46.73	67661	91.2	1824	2.00	M/P Xylene
47.19	973729	5.0	100	1.00	1cl2flbz (IS)
48.59	27346	14.3	285	1.00	O Xylene
48.79	34177	17.5	350	1.00	Styrene
49.11	5063	0.0	0	0.00	
50.14	23629	0.0	0	1.00	Isopropylbenzene
51.84	24661	0.0	0	1.00	n-propylbenzene
51.99	34969	6.0	120	1.00	Bromobenzene
52.25	1888	0.0	0	0.00	
52.54	68238	0.0	0	2.00	1,3,5-tmb/2-cl tol
52.77	32376	16.0	319	1.00	4-cl toluene
54.01	20263	0.0	0	1.00	t-butylbenzene
54.17	33913	82.1	1642	1.00	1,2,4-tmb
54.53	2420	0.0	0	0.00	
54.90	23100	0.0	0	1.00	s-butylbenzene
55.51	23138	0.0	0	1.00	p-isopropyltoluene
55.87	27321	0.0	0	1.00	1,3-dcb
56.35	37690	2.3	47	1.00	1,4-dcb
56.93	1594	0.0	0	0.00	
57.25	27766	0.0	0	1.00	n-butylbenzene
57.90	25047	0.0	0	1.00	1,2-dcb
58.58	1469	0.0	0	0.00	
58.96	1479	0.0	0	0.00	

Continued...

File : c:\ezchrom\data1\160603.10
Method : c:\ezchrom\methods\1voa0603.met
Sample ID : 1.0 ppb 10
Acquired : Jun 04, 1996 00:44:32
Printed : Jun 04, 1996 16:20:56

Channel A Results

RT (min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
59.21	4096	0.0	0	0.00	
60.16	2279	0.0	0	0.00	
61.58	1548	0.0	0	0.00	
61.87	4399	0.0	0	0.00	
62.40	1286	0.0	0	0.00	
62.99	1937	0.0	0	0.00	
63.26	4817	0.0	0	0.00	
64.18	13678	0.0	0	1.00	1,2,4-tcb
64.60	12140	1.9	39	1.00	Hexachlorobutadiene
65.00	17624	1.2	24	1.00	Napthalene
65.75	25198	0.0	0	1.00	1,2,3-tcb
66.00	6120	0.0	0	0.00	
66.38	5987	0.0	0	0.00	
67.20	7077	0.0	0	0.00	

file : c:\ezchrom\data\160603.11
Method : c:\ezchrom\methods\lvoa0603.met
Sample ID : 5.0 ppb 11
Acquired : Jun 04, 1996 02:11:08
Printed : Jun 04, 1996 16:21:29

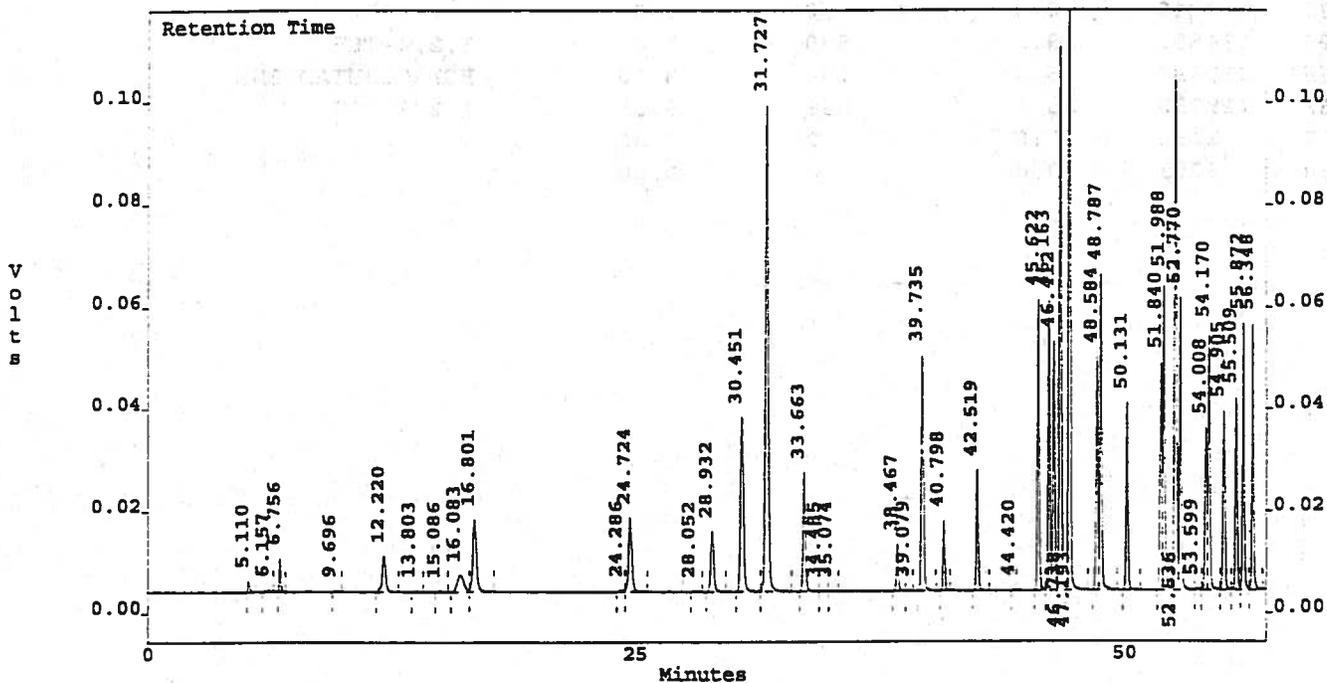
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
63.37	1740	0.0	0	0.00	
64.25	134551	29.5	590	5.00	1,2,4-TCB
64.66	211693	5.3	106	5.00	HEXACHLOROCYCLOHEPTADIENE
65.83	118250	25.3	506	5.00	1,2,3-TCB
66.77	1151	0.0	0	0.00	
66.99	5053	0.0	0	0.00	

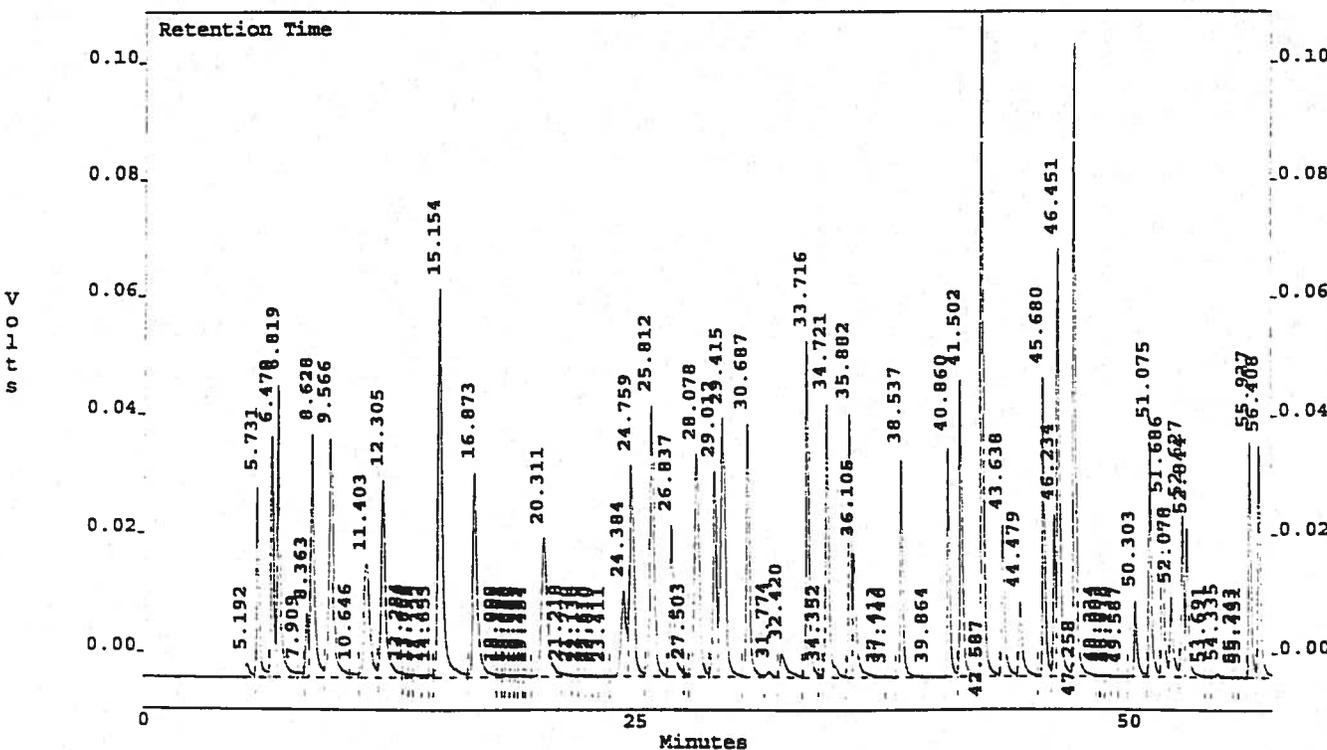
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.12
Method : c:\ezchrom\methods\1voa0603.met
Sample ID : 10.0 ppb 12
Acquired : Jun 04, 1996 03:44:18
Printed : Jun 04, 1996 16:21:59

c:\ezchrom\data\160603.12 -- Channel A



c:\ezchrom\data\160603.12 -- Channel B



File : c:\ezchrom\data1\160603.12
Method : c:\ezchrom\methods\lvoa0603.met
Sample ID : 10.0 ppb 12
Acquired : Jun 04, 1996 03:44:18
Printed : Jun 04, 1996 16:22:06

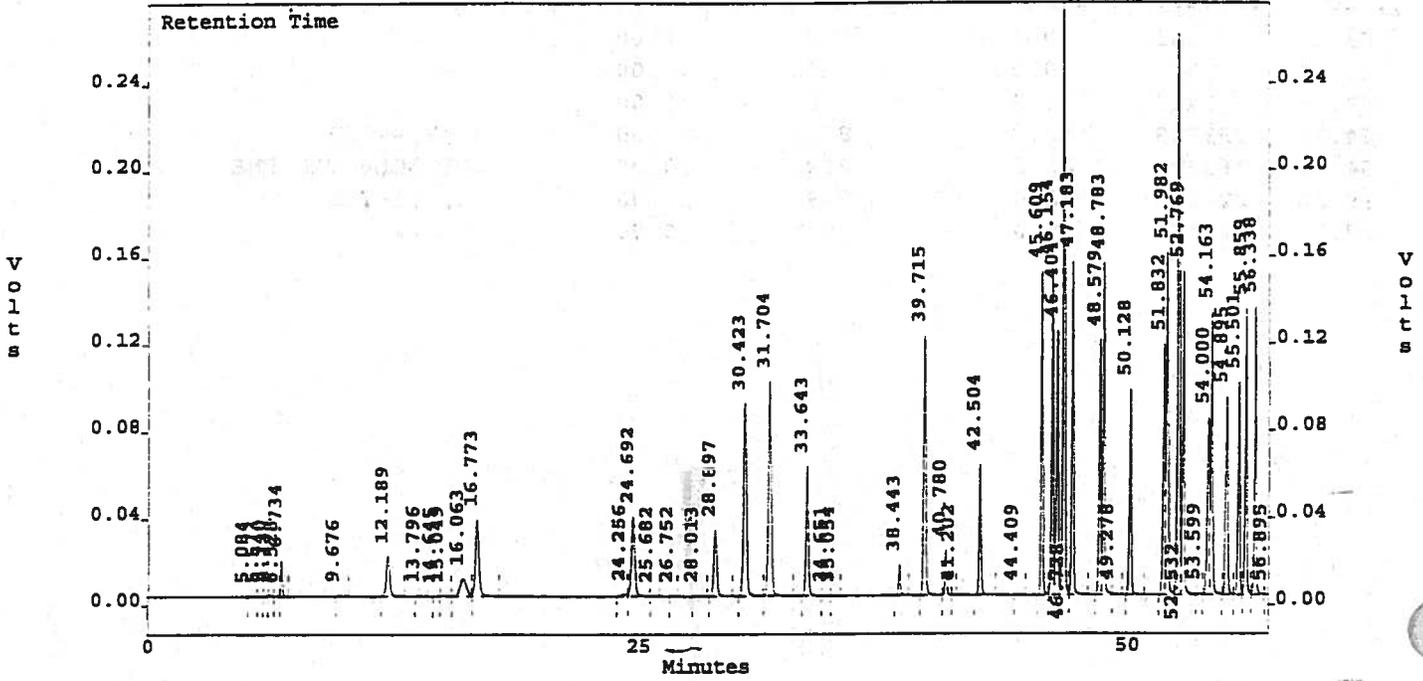
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
63.00	645	0.0	0	0.00	
63.33	539	0.0	0	0.00	
63.98	1489	0.0	0	0.00	
64.22	259719	42.7	855	10.00	1,2,4-TCB
64.64	365921	38.5	769	10.00	HEXAChLBTADIENE
65.80	224600	42.0	839	10.00	1,2,3-TCB
67.36	457	0.0	0	0.00	

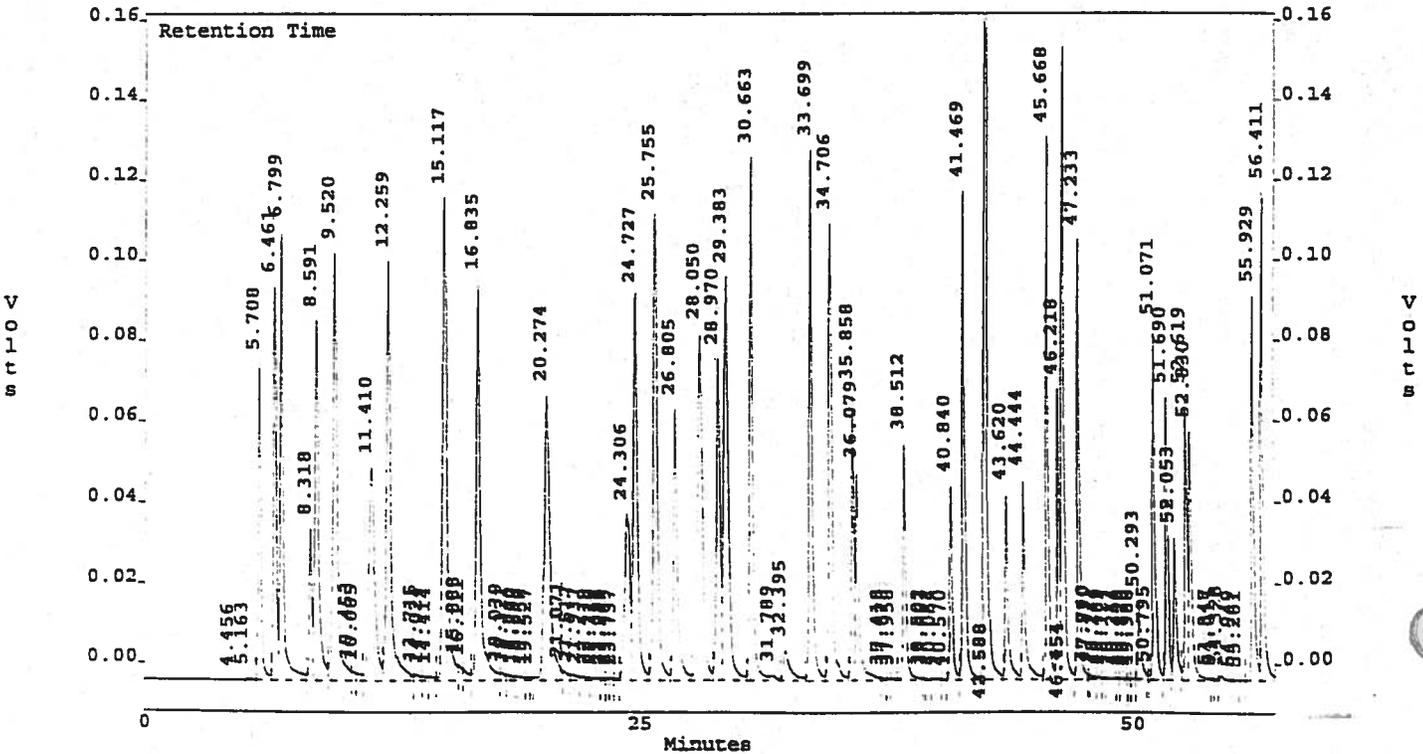
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.13
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 25.0 ppb 13
 Acquired : Jun 04, 1996 05:12:00
 Printed : Jun 04, 1996 16:22:34

c:\ezchrom\data\160603.13 -- Channel A



c:\ezchrom\data\160603.13 -- Channel B



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File : c:\ezchrom\data1\160603.12
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 10.0 ppb 12
 Acquired : Jun 04, 1996 03:44:18
 Printed : Jun 04, 1996 16:22:05

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.11	14605	0.0	0	0.00	
6.16	3577	0.0	0	0.00	
6.76	34522	59.1	1182	10.00	Vinyl Chloride
9.70	2310	0.0	0	0.00	
12.22	95447	51.7	1034	10.00	1,1-dce
13.80	2071	0.0	0	0.00	
15.09	2643	0.0	0	0.00	
16.08	75840	54.3	1085	10.00	Mtbe
16.80	188995	54.9	1098	10.00	Trans 1,2-dce
24.29	6379	0.0	0	0.00	
24.72	180873	57.0	1140	10.00	Cis 1,2-dce
28.05	2038	0.0	0	0.00	
28.93	135845	55.8	1115	10.00	1,1-dcpe
30.45	386451	56.1	1123	10.00	Benzene
31.73	982987	5.0	100	1.00	Flbenzene (IS)
33.66	208647	57.1	1143	10.00	Tce
34.48	1214	0.0	0	0.00	
35.07	1412	0.0	0	0.00	
38.47	66968	52.3	1047	10.00	Cis 1,3-dcpe
39.08	1678	0.0	0	0.00	
39.73	358951	55.3	1107	10.00	Toluene
40.80	87700	52.9	1059	10.00	Trans 1,3-dcpe
42.52	174387	56.3	1126	10.00	Pce
44.42	1787	0.0	0	0.00	
45.62	365857	560.8	11215	100.00	1cl4fbz (surr)
46.16	373538	55.1	1101	10.00	Chlorobenzene
46.41	343443	55.3	1106	10.00	Ethylbenzene
46.74	759880	109.6	2191	20.00	M/P Xylene
47.19	969072	5.0	100	1.00	1cl2flbz (IS)
48.58	309112	55.3	1105	10.00	O Xylene
48.79	410794	56.8	1136	10.00	Styrene
50.13	266733	54.8	1096	10.00	Isopropylbenzene
51.84	286215	54.8	1096	10.00	n-propylbenzene
51.99	397905	54.9	1097	10.00	Bromobenzene
52.54	772019	109.6	2191	20.00	1,3,5-tmb/2-cl tol
52.77	365601	55.2	1104	10.00	4-cl toluene
53.60	2107	0.0	0	0.00	
54.01	225809	55.1	1101	10.00	t-butylbenzene
54.17	344017	54.2	1084	10.00	1,2,4-tmb
54.91	252157	54.2	1084	10.00	s-butylbenzene
55.51	253547	54.3	1086	10.00	p-isopropyltoluene
55.87	322233	54.8	1097	10.00	1,3-dcb
56.35	315996	55.9	1118	10.00	1,4-dcb
57.25	264619	53.5	1071	10.00	n-butylbenzene
57.90	257148	54.0	1080	10.00	1,2-dcb

Continued...

File : c:\ezchrom\data1\160603.12
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 10.0 ppb 12
 Acquired : Jun 04, 1996 03:44:18
 Printed : Jun 04, 1996 16:22:05

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil($\mu\text{g}/\text{kg}$)	Soln($\mu\text{g}/\text{L}$)	Compound
60.16	2445	0.0	0	0.00	
64.17	149351	45.4	908	10.00	1,2,4-tcb
64.59	104361	39.2	785	10.00	Hexachlorobutadiene
64.99	199920	49.0	979	10.00	Napthalene
65.74	129360	39.9	799	10.00	1,2,3-tcb

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File : c:\ezchrom\data\160603.12
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 10.0 ppb 12
 Acquired : Jun 04, 1996 03:44:18
 Printed : Jun 04, 1996 16:22:05

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.19	35101	0.0	0	0.00	
5.73	294440	52.0	1039	10.00	DCDFM
6.40	412037	63.0	1261	10.00	CHLOROMETHANE
6.82	526516	54.6	1092	10.00	VINYL CHLORIDE
7.91	15216	0.0	0	0.00	
8.36	101261	0.0	0	10.00	BROMOMETHANE
8.63	522171	50.8	1017	10.00	CHLOROETHANE
9.57	646216	53.1	1063	10.00	TCFM
10.65	16483	0.0	0	0.00	
11.40	437952	66.6	1332	10.00	FREON 113
12.31	562044	51.8	1035	10.00	1,1-DCE
13.28	11063	0.0	0	0.00	
13.66	6166	0.0	0	0.00	
13.80	10789	0.0	0	0.00	
14.32	9288	0.0	0	0.00	
14.65	6773	0.0	0	0.00	
15.15	1017137	99.2	1984	10.00	METH CHLORIDE
16.87	554758	64.9	1298	10.00	TRANS 1,2-DCE
18.01	5413	0.0	0	0.00	
18.28	2790	0.0	0	0.00	
18.39	4300	0.0	0	0.00	
18.62	3166	0.0	0	0.00	
18.88	1899	0.0	0	0.00	
19.13	3020	0.0	0	0.00	
19.29	1170	0.0	0	0.00	
19.45	2102	0.0	0	0.00	
20.31	509702	58.8	1176	10.00	1,1-DCA
21.22	11123	0.0	0	0.00	
21.77	3045	0.0	0	0.00	
22.13	1993	0.0	0	0.00	
22.61	1902	0.0	0	0.00	
22.81	397	0.0	0	0.00	
23.41	1912	0.0	0	0.00	
24.38	267570	45.2	904	10.00	2,2-DCPA
24.76	542932	18.3	366	10.00	CIS 1,2-DCE
25.81	662133	50.0	1000	10.00	CHLOROFORM
26.84	349181	62.1	1242	10.00	BCM
27.50	6850	0.0	0	0.00	
28.08	638628	52.2	1044	10.00	1,1,1-TCA
29.01	441080	53.1	1062	10.00	1,1-DCPE
29.41	757584	51.9	1038	10.00	CARBON TET
30.69	483113	46.5	930	10.00	1,2-DCA
31.77	16641	0.0	0	0.00	
32.42	97464	60.3	1206	10.00	2-CL ETH VI ETH
33.72	603140	47.8	957	10.00	TCE

Continued...

File : c:\ezchrom\data\160603.12
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 10.0 ppb 12
 Acquired : Jun 04, 1996 03:44:18
 Printed : Jun 04, 1996 16:22:06

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
34.35	5269	0.0	0	0.00	
34.72	509397	46.6	933	10.00	1,2-DCPA
35.88	404140	53.8	1076	10.00	BRDICLMETHANE
36.11	283762	44.7	894	10.00	DIBROMOMETHANE
37.41	5932	0.0	0	0.00	
37.75	2786	0.0	0	0.00	
38.54	347855	45.3	907	10.00	CIS 1,3-DCPE
39.86	2922	0.0	0	0.00	
40.86	315334	48.8	977	10.00	TRANS 1,3-DCPE
41.50	514152	47.0	941	10.00	1,1,2-TCA
42.59	1154865	108.1	2162	20.00	1,3 DCPA/PCE
43.64	276687	52.0	1040	10.00	DIBRCLMETHANE
44.48	168462	48.2	965	10.00	1,2-DBEA (EDB)
45.68	438147	609.5	12189	100.00	1CL4FBZ (SURR)
46.23	207276	51.5	1029	10.00	CHLOROBENZENE
46.45	743607	55.6	1113	10.00	1,1,1,2-PCA
47.26	913170	5.0	100	1.00	1CL2FBZ (IS)
48.33	1973	0.0	0	0.00	
48.59	2217	0.0	0	0.00	
48.88	2313	0.0	0	0.00	
49.13	1316	0.0	0	0.00	
49.59	946	0.0	0	0.00	
50.30	130274	0.0	0	10.00	BROMOFORM
51.07	365215	50.0	1000	10.00	1,1,2,2-PCA
51.69	258984	47.5	950	10.00	1,2,3-TCPA
52.08	146074	61.4	1229	10.00	BROMOBENZENE
52.63	217238	58.2	1164	10.00	2-CL TOLUENE
52.84	241665	43.3	866	10.00	4-CL TOLUENE
53.69	2619	0.0	0	0.00	
54.33	9577	0.0	0	0.00	
55.24	489	0.0	0	0.00	
55.45	1281	0.0	0	0.00	
55.94	340519	49.4	988	10.00	1,3-DCB
56.41	353821	47.8	955	10.00	1,4-DCB
57.61	2681	0.0	0	0.00	
57.95	329999	51.9	1037	10.00	1,2-DCB
58.91	1254	0.0	0	0.00	
59.07	850	0.0	0	0.00	
59.23	3094	0.0	0	0.00	
59.75	380	0.0	0	0.00	
59.94	527	0.0	0	0.00	
60.33	1547	0.0	0	0.00	
60.50	823	0.0	0	0.00	
61.27	46134	74.9	1498	10.00	1,2-DBr-3-CPA
61.81	3028	0.0	0	0.00	
62.20	1375	0.0	0	0.00	
62.62	846	0.0	0	0.00	

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McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.13
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 25.0 ppb 13
 Acquired : Jun 04, 1996 05:12:00
 Printed : Jun 04, 1996 16:22:41

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
5.08	1837	0.0	0	0.00	
5.57	2099	0.0	0	0.00	
5.94	3078	0.0	0	0.00	
6.14	7857	0.0	0	0.00	
6.53	4096	0.0	0	0.00	
6.73	86363	120.2	2404	25.00	Vinyl Chloride
9.68	5877	0.0	0	0.00	
12.19	244774	120.5	2410	25.00	1,1-dce
13.80	7095	0.0	0	0.00	
14.64	1295	0.0	0	0.00	
15.05	5654	0.0	0	0.00	
16.06	190448	118.2	2364	25.00	Mtbe
16.77	468721	117.7	2353	25.00	Trans 1,2-dce
24.26	19512	0.0	0	0.00	
24.69	469695	123.1	2462	25.00	Cis 1,2-dce
25.68	1565	0.0	0	0.00	
26.75	2031	0.0	0	0.00	
28.01	6250	0.0	0	0.00	
28.90	354306	123.5	2470	25.00	1,1-dcpe
30.42	998266	122.5	2451	25.00	Benzene
31.70	1015904	5.0	100	1.00	Flbenzene (IS)
33.64	535244	122.9	2459	25.00	Tce
34.65	2912	0.0	0	0.00	
35.05	2381	0.0	0	0.00	
38.44	103258	72.8	1457	25.00	Cis 1,3-dcpe
39.71	934133	123.5	2470	25.00	Toluene
40.78	131751	71.1	1423	25.00	Trans 1,3-dcpe
41.20	2340	0.0	0	0.00	
42.50	452174	123.0	2460	25.00	Pce
44.41	4977	0.0	0	0.00	
45.61	945597	1249.9	24999	250.00	1cl4fbz (surr)
46.15	969025	122.9	2459	25.00	Chlorobenzene
46.40	865490	119.3	2386	25.00	Ethylbenzene
46.73	1945915	242.6	4853	50.00	M/P Xylene
47.18	1026493	5.0	100	1.00	1cl2flbz (IS)
48.58	799140	122.5	2451	25.00	O Xylene
48.76	1003821	116.0	2320	25.00	Styrene
49.28	5101	0.0	0	0.00	
50.13	680673	120.9	2417	25.00	Isopropylbenzene
51.83	733435	121.3	2425	25.00	n-propylbenzene
51.98	1023828	121.9	2439	25.00	Bromobenzene
52.53	1961992	240.8	4815	50.00	1,3,5-tmb/2-cl tol
52.77	934506	121.2	2423	25.00	4-cl toluene
53.60	6258	0.0	0	0.00	
54.00	581774	122.1	2442	25.00	t-butylbenzene

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File : c:\ezchrom\data1\160603.13
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 25.0 ppb 13
 Acquired : Jun 04, 1996 05:12:00
 Printed : Jun 04, 1996 16:22:41

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
54.16	876039	120.9	2418	25.00	1,2,4-tmb
54.90	652320	122.5	2450	25.00	s-butylbenzene
55.50	654980	122.4	2448	25.00	p-isopropyltoluene
55.86	820078	120.4	2408	25.00	1,3-dcb
56.34	800403	123.8	2477	25.00	1,4-dcb
56.90	3453	0.0	0	0.00	
57.24	691223	124.0	2480	25.00	n-butylbenzene
57.89	654074	120.9	2418	25.00	1,2-dcb
58.63	2964	0.0	0	0.00	
59.17	3452	0.0	0	0.00	
60.16	2629	0.0	0	0.00	
61.21	1435	0.0	0	0.00	
63.23	3436	0.0	0	0.00	
63.87	1398	0.0	0	0.00	
64.16	419486	129.2	2583	25.00	1,2,4-tcb
64.59	331151	143.6	2871	25.00	Hexachlorobutadiene
64.99	519385	121.4	2428	25.00	Napthalene
65.74	372341	130.8	2615	25.00	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.13
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 25.0 ppb 13
 Acquired : Jun 04, 1996 05:12:00
 Printed : Jun 04, 1996 16:22:41

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
4.46	677	0.0	0	0.00	
5.16	4583	0.0	0	0.00	
5.71	718943	118.3	2367	25.00	DCDFM
6.46	972760	117.4	2348	25.00	CHLOROMETHANE
6.80	1189475	111.4	2227	25.00	VINYL CHLORIDE
8.32	341245	0.0	0	25.00	BROMOMETHANE
8.59	1174103	108.4	2168	25.00	CHLOROETHANE
9.52	1583468	119.5	2390	25.00	TCFM
10.45	29668	0.0	0	0.00	
10.68	32098	0.0	0	0.00	
11.41	1119233	125.7	2514	25.00	FREON 113
12.26	1691460	145.9	2918	25.00	1,1-DCE
13.71	28697	0.0	0	0.00	
14.02	18886	0.0	0	0.00	
14.41	19488	0.0	0	0.00	
15.12	1905226	106.9	2138	25.00	METH CHLORIDE
15.89	44516	0.0	0	0.00	
16.11	52463	0.0	0	0.00	
16.83	1518206	135.4	2707	25.00	TRANS 1,2-DCE
18.04	32083	0.0	0	0.00	
18.32	26891	0.0	0	0.00	
18.74	6898	0.0	0	0.00	
18.89	18202	0.0	0	0.00	
19.25	9405	0.0	0	0.00	
19.53	5177	0.0	0	0.00	
20.27	1434181	137.3	2747	25.00	1,1-DCA
21.07	29659	0.0	0	0.00	
21.52	35869	0.0	0	0.00	
21.94	22131	0.0	0	0.00	
22.44	5406	0.0	0	0.00	
22.71	12836	0.0	0	0.00	
23.09	8514	0.0	0	0.00	
23.25	5519	0.0	0	0.00	
23.49	6066	0.0	0	0.00	
23.74	6961	0.0	0	0.00	
24.31	800128	101.6	2032	25.00	2,2-DCPA
24.73	1509365	214.6	4292	25.00	CIS 1,2-DCE
25.76	1735012	128.2	2564	25.00	CHLOROFORM
26.81	918554	128.4	2567	25.00	BCM
28.05	1528035	117.0	2340	25.00	1,1,1-TCA
28.97	1054411	117.1	2342	25.00	1,1-DCPE
29.38	1739628	112.2	2245	25.00	CARBON TET
30.66	1428766	142.7	2854	25.00	1,2-DCA
31.79	28035	0.0	0	0.00	
32.39	187297	93.4	1868	25.00	2-CL ETH VI ETH

Continued...

File : c:\ezchrom\data\160603.13
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 25.0 ppb 13
 Acquired : Jun 04, 1996 05:12:00
 Printed : Jun 04, 1996 16:22:41

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln(µg/l)	Compound
33.70	1487301	120.8	2415	25.00	TCE
34.71	1421597	135.5	2710	25.00	1,2-DCPA
35.86	642695	78.0	1561	25.00	BRD1CLMETHANE
36.08	653857	108.5	2171	25.00	DIBROMOMETHANE
37.42	7698	0.0	0	0.00	
37.68	5453	0.0	0	0.00	
37.96	6942	0.0	0	0.00	
38.51	558943	77.1	1541	25.00	CIS 1,3-DCPE
39.50	2415	0.0	0	0.00	
39.66	3990	0.0	0	0.00	
40.06	5413	0.0	0	0.00	
40.57	1923	0.0	0	0.00	
40.84	429714	66.4	1327	25.00	TRANS 1,3-DCPE
41.47	1192538	111.8	2237	25.00	1,1,2-TCA
42.59	2909154	248.0	4960	50.00	1,3 DCPA/PCE
43.62	458804	80.5	1611	25.00	DIBRCLMETHANE
44.44	529898	147.6	2952	25.00	1,2-DBEA (EDB)
45.67	1065716	1224.1	24483	250.00	1CL4FBZ (SURR)
46.22	549133	128.8	2576	25.00	CHLOROBENZENE
46.45	1498993	99.5	1990	25.00	1,1,1,2-PCA
47.23	927730	5.0	100	1.00	1CL2FBZ (IS)
47.74	7045	0.0	0	0.00	
47.82	15225	0.0	0	0.00	
48.24	6596	0.0	0	0.00	
48.49	3230	0.0	0	0.00	
48.72	6023	0.0	0	0.00	
49.24	2060	0.0	0	0.00	
49.50	2853	0.0	0	0.00	
49.77	454	0.0	0	0.00	
49.99	888	0.0	0	0.00	
50.29	202007	68.0	1360	25.00	BROMOFORM
50.80	6600	0.0	0	0.00	
51.07	761032	101.5	2031	25.00	1,1,2,2-PCA
51.69	593082	110.9	2217	25.00	1,2,3-TCPA
52.05	351847	117.3	2347	25.00	BROMOBENZENE
52.62	560292	126.7	2534	25.00	2-CL TOLUENE
52.83	630596	123.7	2473	25.00	4-CL TOLUENE
53.85	3372	0.0	0	0.00	
54.02	4959	0.0	0	0.00	
54.33	20768	0.0	0	0.00	
54.95	2684	0.0	0	0.00	
55.26	1011	0.0	0	0.00	
55.93	788831	112.2	2244	25.00	1,3-DCB
56.41	996701	135.8	2716	25.00	1,4-DCB
57.95	864132	128.0	2560	25.00	1,2-DCB
58.85	6404	0.0	0	0.00	
59.19	2523	0.0	0	0.00	

Continued...

File : c:\ezchrom\data\160603.13
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 25.0 ppb 13
 Acquired : Jun 04, 1996 05:12:00
 Printed : Jun 04, 1996 16:22:41

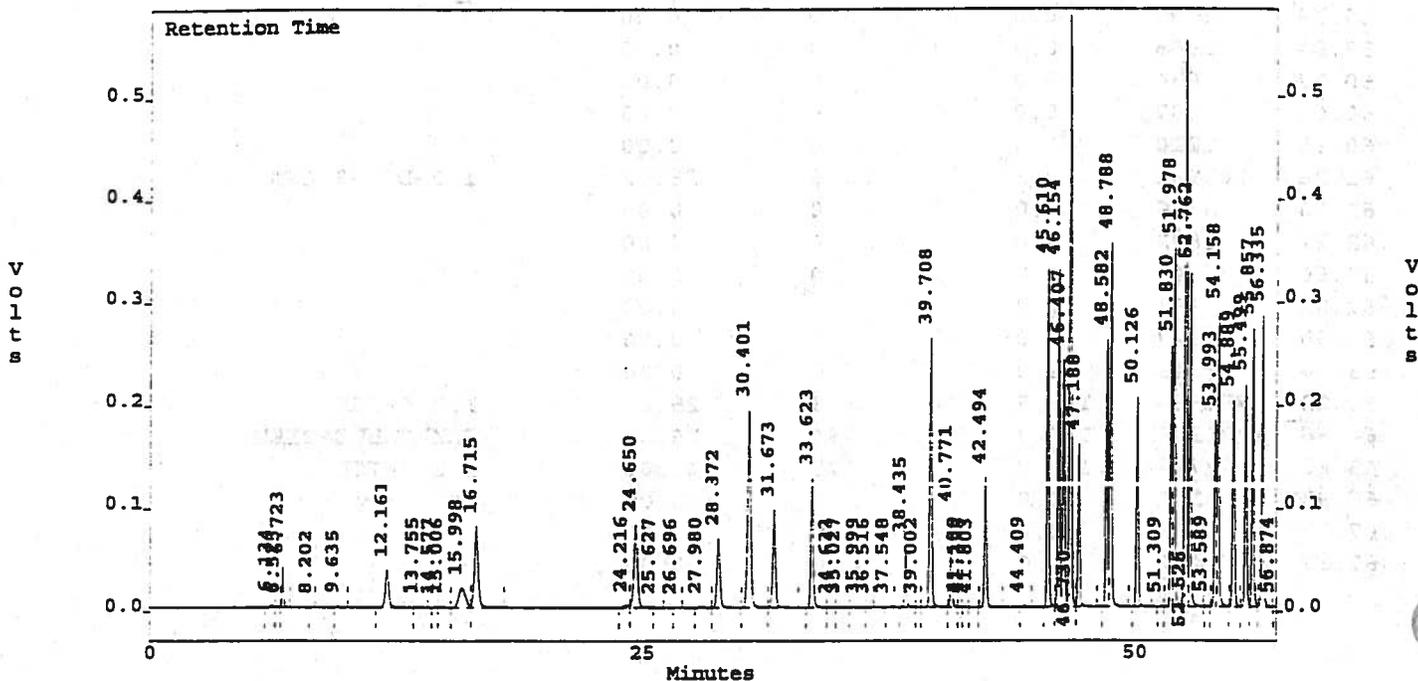
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
59.39	2799	0.0	0	0.00	
59.84	1666	0.0	0	0.00	
60.12	634	0.0	0	0.00	
60.64	987	0.0	0	0.00	
60.95	1210	0.0	0	0.00	
61.26	103961	110.3	2206	25.00	1,2-DBr-3-CPA
61.86	5616	0.0	0	0.00	
62.22	1892	0.0	0	0.00	
62.60	645	0.0	0	0.00	
62.89	393	0.0	0	0.00	
63.55	427	0.0	0	0.00	
63.94	7843	0.0	0	0.00	
64.22	751834	135.7	2713	25.00	1,2,4-TCB
64.66	1085306	139.7	2794	25.00	HEXAChLButADIENE
65.80	668776	138.8	2775	25.00	1,2,3-TCB
66.93	3100	0.0	0	0.00	
67.17	588	0.0	0	0.00	
67.37	487	0.0	0	0.00	

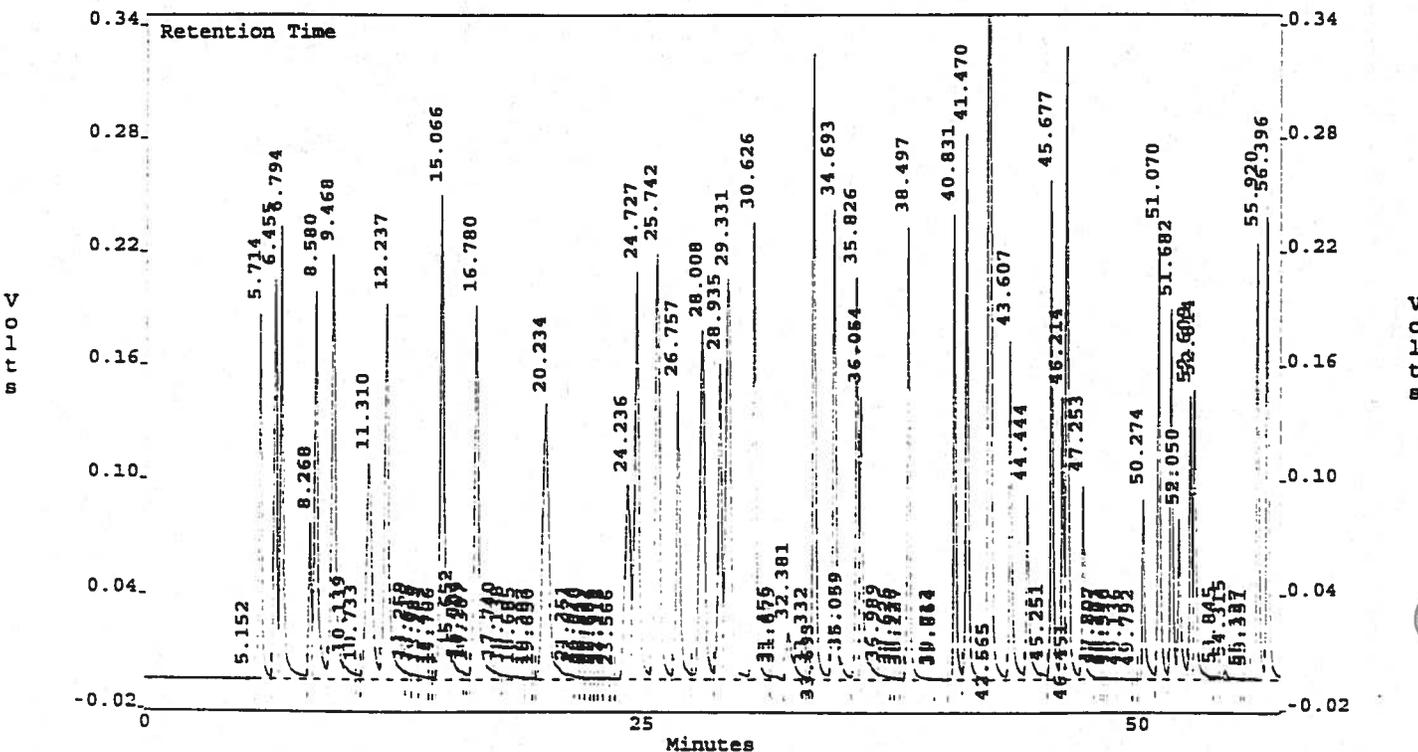
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.14
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 50.0 ppb 14
 Acquired : Jun 04, 1996 06:38:51
 Printed : Jun 04, 1996 16:23:09

c:\ezchrom\data\160603.14 -- Channel A



c:\ezchrom\data\160603.14 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.14
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 50.0 ppb 14
 Acquired : Jun 04, 1996 06:38:51
 Printed : Jun 04, 1996 16:23:16

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
6.13	18123	0.0	0	0.00	
6.52	7037	0.0	0	0.00	
6.72	200305	276.1	5521	50.00	Vinyl Chloride
8.20	2006	0.0	0	0.00	
9.63	10969	0.0	0	0.00	
12.16	474289	230.2	4604	50.00	1,1-dce
13.75	10884	0.0	0	0.00	
14.58	1314	0.0	0	0.00	
15.01	11631	0.0	0	0.00	
16.00	439262	272.9	5459	50.00	Mtbe
16.71	1059983	268.1	5363	50.00	Trans 1,2-dce
24.22	43588	0.0	0	0.00	
24.65	1040289	263.2	5263	50.00	Cis 1,2-dce
25.63	3010	0.0	0	0.00	
26.70	2191	0.0	0	0.00	
27.98	15226	0.0	0	0.00	
28.87	784693	263.4	5267	50.00	1,1-dcpe
30.40	2181207	259.8	5196	50.00	Benzene
31.67	985701	5.0	100	1.00	Flbenzene (IS)
33.62	1161646	258.9	5178	50.00	Tce
34.63	6136	0.0	0	0.00	
35.03	8810	0.0	0	0.00	
36.00	3405	0.0	0	0.00	
36.52	1326	0.0	0	0.00	
37.55	2538	0.0	0	0.00	
38.44	432170	444.1	8882	50.00	Cis 1,3-dcpe
39.00	1552	0.0	0	0.00	
39.71	2059208	262.4	5249	50.00	Toluene
40.77	573672	457.9	9157	50.00	Trans 1,3-dcpe
41.19	7099	0.0	0	0.00	
41.40	3160	0.0	0	0.00	
41.80	1566	0.0	0	0.00	
42.49	969430	254.9	5099	50.00	Pce
44.41	9977	0.0	0	0.00	
45.61	2093582	2655.1	53103	500.00	1cl4fbz (surr)
46.15	2134536	262.1	5242	50.00	Chlorobenzene
46.41	1787209	244.9	4899	50.00	Ethylbenzene
46.73	4181302	510.8	10217	100.00	M/P Xylene
47.19	1073223	5.0	100	1.00	1cl2flbz (IS)
48.58	1769448	263.4	5267	50.00	O Xylene
48.79	2333617	274.9	5497	50.00	Styrene
50.13	1481096	258.5	5171	50.00	Isopropylbenzene
51.31	2046	0.0	0	0.00	
51.83	1629989	264.0	5280	50.00	n-propylbenzene
51.98	2266197	263.2	5264	50.00	Bromobenzene

Continued...

File : c:\ezchrom\data1\160603.14
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 50.0 ppb 14
 Acquired : Jun 04, 1996 06:38:51
 Printed : Jun 04, 1996 16:23:16

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
52.53	4272129	517.2	10345	100.00	1,3,5-tmb/2-cl tol
52.76	2063709	262.4	5248	50.00	4-cl toluene
53.59	14521	0.0	0	0.00	
53.99	1294819	264.7	5293	50.00	t-butylbenzene
54.16	1945015	264.2	5283	50.00	1,2,4-tmb
54.89	1462903	266.9	5337	50.00	s-butylbenzene
55.50	1464115	266.0	5320	50.00	p-isopropyltoluene
55.86	1751046	253.5	5070	50.00	1,3-dcb
56.33	1759275	264.6	5291	50.00	1,4-dcb
56.87	6309	0.0	0	0.00	
57.24	1541257	266.0	5320	50.00	n-butylbenzene
57.89	1432127	260.7	5213	50.00	1,2-dcb
58.62	6762	0.0	0	0.00	
58.94	3776	0.0	0	0.00	
59.17	4219	0.0	0	0.00	
59.37	2154	0.0	0	0.00	
59.58	3045	0.0	0	0.00	
59.78	1506	0.0	0	0.00	
60.17	2358	0.0	0	0.00	
61.00	4005	0.0	0	0.00	
61.21	4494	0.0	0	0.00	
61.45	2555	0.0	0	0.00	
61.67	1852	0.0	0	0.00	
63.23	2677	0.0	0	0.00	
63.89	1458	0.0	0	0.00	
64.18	933002	265.8	5316	50.00	1,2,4-tcb
64.61	669300	244.1	4882	50.00	Hexachlorobutadiene
65.01	1178527	270.0	5401	50.00	Napthalene
65.75	802023	259.2	5184	50.00	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.10
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 1.0 ppb 10
 Acquired : Jun 04, 1996 00:44:32
 Printed : Jun 04, 1996 16:20:56

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
5.20	1933	0.0	0	0.00	
5.75	14891	4.1	83	1.00	DCDFM
6.48	28518	3.1	62	1.00	CHLOROMETHANE
6.82	33115	3.0	61	1.00	VINYL CHLORIDE
8.63	19043	0.0	0	1.00	CHLOROETHANE
9.10	527	0.0	0	0.00	
9.56	33839	3.6	72	1.00	TCFM
11.44	18175	3.3	66	1.00	FREON 113
12.30	32731	3.1	63	1.00	1,1-DCE
13.04	2017	0.0	0	0.00	
13.19	1902	0.0	0	0.00	
13.73	517	0.0	0	0.00	
14.14	1195	0.0	0	0.00	
14.49	489	0.0	0	0.00	
14.72	328	0.0	0	0.00	
15.14	238333	3.4	67	1.00	METH CHLORIDE
16.41	2026	0.0	0	0.00	
16.83	34915	0.0	0	1.00	TRANS 1,2-DCE
17.39	3303	0.0	0	0.00	
19.47	1419	0.0	0	0.00	
19.74	643	0.0	0	0.00	
20.26	24107	4.9	99	1.00	1,1-DCA
20.74	2406	0.0	0	0.00	
21.09	689	0.0	0	0.00	
21.31	1190	0.0	0	0.00	
21.52	722	0.0	0	0.00	
23.10	979	0.0	0	0.00	
24.33	12702	0.0	0	1.00	2,2-DCPA
24.74	28499	0.0	0	1.00	CIS 1,2-DCE
25.77	44265	3.3	66	1.00	CHLOROFORM
26.82	11124	158.0	3160	1.00	BCM
27.44	633	0.0	0	0.00	
28.05	38029	6.7	135	1.00	1,1,1-TCA
28.97	27268	4.8	96	1.00	1,1-DCPE
29.38	49777	6.2	123	1.00	CARBON TET
30.03	1869	0.0	0	0.00	
30.67	33684	5.5	110	1.00	1,2-DCA
31.73	13765	0.0	0	0.00	
32.38	2630	0.0	0	1.00	2-CL ETH VI ETH
33.70	64653	6.1	121	1.00	TCE
34.71	43446	4.2	84	1.00	1,2-DCPA
35.24	2190	0.0	0	0.00	
35.86	18805	10.1	202	1.00	BRDICLMETHANE
36.11	10231	0.0	0	1.00	DIBROMOMETHANE
36.92	828	0.0	0	0.00	

Continued...

File : c:\ezchrom\data1\160603.10
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 1.0 ppb 10
 Acquired : Jun 04, 1996 00:44:32
 Printed : Jun 04, 1996 16:20:56

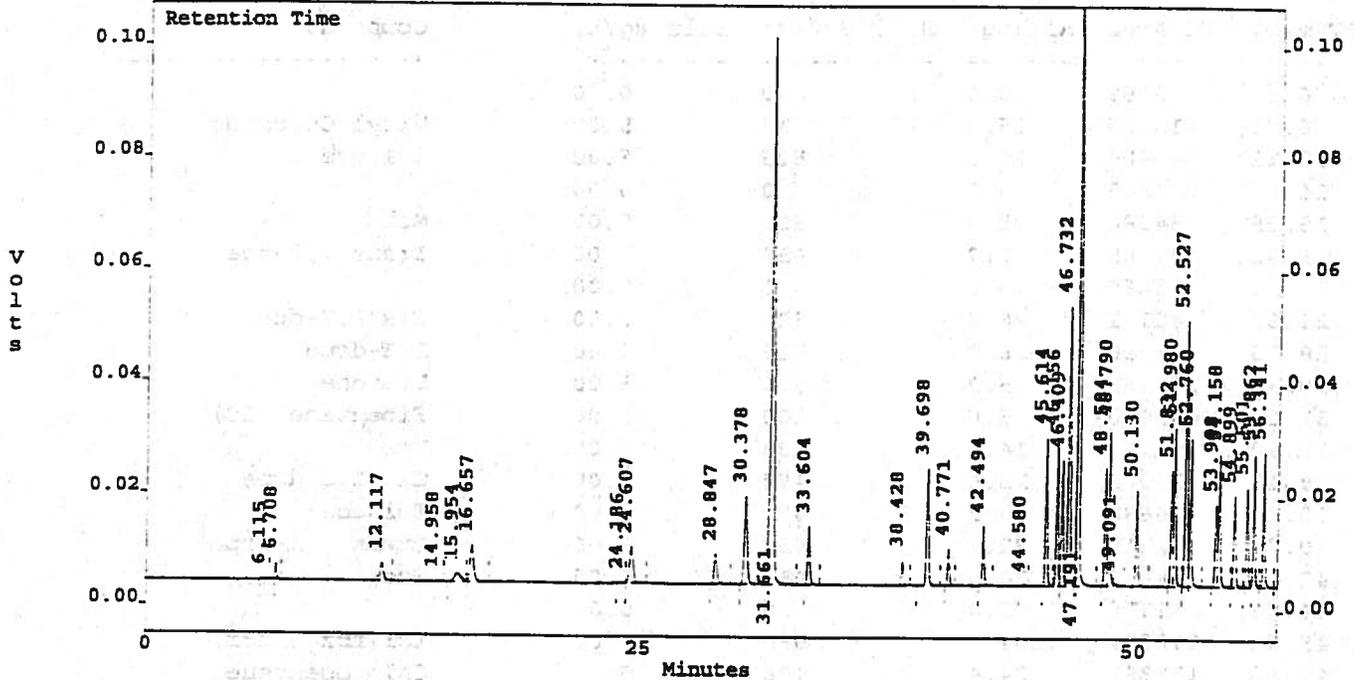
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
38.51	18466	0.0	0	1.00	CIS 1,3-DCPE
39.95	535	0.0	0	0.00	
40.10	375	0.0	0	0.00	
40.85	18857	0.0	0	1.00	TRANS 1,3-DCPE
41.46	31288	5.3	106	1.00	1,1,2-TCA
42.16	993	0.0	0	0.00	
42.61	77615	10.1	202	2.00	1,3 DCPA/PCE
43.64	6820	1.3	26	1.00	DIBRCLMETHANE
44.55	2645	0.0	0	1.00	1,2-DBEA (EDB)
44.86	360	0.0	0	0.00	
45.00	319	0.0	0	0.00	
45.18	233	0.0	0	0.00	
45.69	29935	23.3	466	10.00	1CL4FBZ (SURR)
46.23	11206	4.8	97	1.00	CHLOROBENZENE
46.46	49749	5.3	107	1.00	1,1,1,2-PCA
47.24	719552	5.0	100	1.00	1CL2FBZ (IS)
48.24	1747	0.0	0	0.00	
48.46	1578	0.0	0	0.00	
49.77	576	0.0	0	0.00	
50.36	3000	0.0	0	1.00	BROMOFORM
50.66	1233	0.0	0	0.00	
51.10	22689	5.6	112	1.00	1,1,2,2-PCA
51.71	17851	0.0	0	1.00	1,2,3-TCPA
52.09	3261	0.0	0	1.00	BROMOBENZENE
52.63	11384	5.8	116	1.00	2-CL TOLUENE
52.83	15849	0.0	0	1.00	4-CL TOLUENE
53.32	1096	0.0	0	0.00	
55.13	345	0.0	0	0.00	
55.37	461	0.0	0	0.00	
55.94	18823	81.2	1623	1.00	1,3-DCB
56.42	21077	8.9	178	1.00	1,4-DCB
57.50	496	0.0	0	0.00	
57.96	20117	14.1	282	1.00	1,2-DCB
58.90	731	0.0	0	0.00	
59.41	277	0.0	0	0.00	
61.28	479	2.1	43	1.00	1,2-DBr-3-CPA
61.46	707	0.0	0	0.00	
62.13	258	0.0	0	0.00	
64.25	13288	0.9	18	1.00	1,2,4-TCB
64.66	31427	2.1	42	1.00	HEXACLBTADIENE
65.10	1247	0.0	0	0.00	
65.46	568	0.0	0	0.00	
65.82	10373	1.6	33	1.00	1,2,3-TCB
67.36	538	0.0	0	0.00	

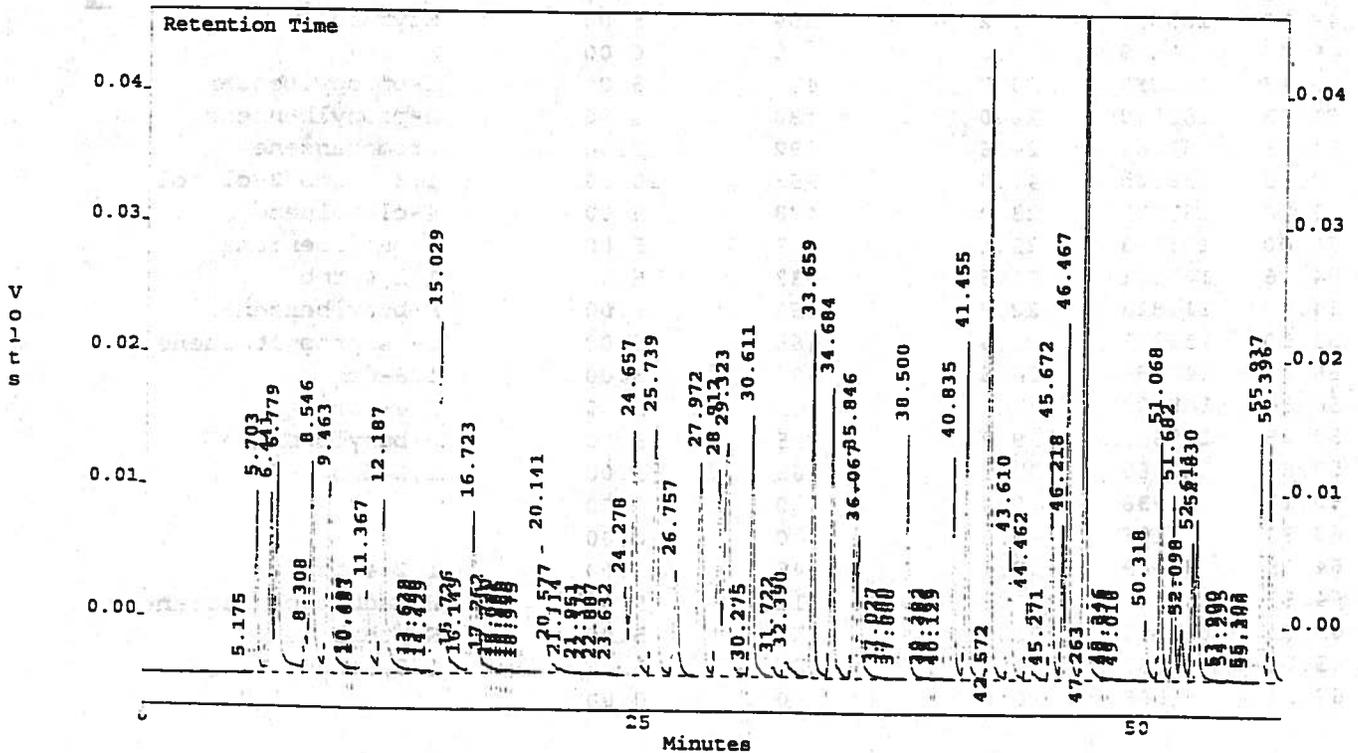
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.11
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 5.0 ppb 11
 Acquired : Jun 04, 1996 02:11:08
 Printed : Jun 04, 1996 16:21:22

c:\ezchrom\data\160603.11 -- Channel A



c:\ezchrom\data\160603.11 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.11
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 5.0 ppb 11
 Acquired : Jun 04, 1996 02:11:08
 Printed : Jun 04, 1996 16:21:29

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
6.12	3069	0.0	0	0.00	
6.71	15006	15.8	317	5.00	Vinyl Chloride
12.12	46405	26.3	525	5.00	1,1-dce
14.96	1345	0.0	0	0.00	
15.95	34980	25.4	509	5.00	Mtbe
16.66	87285	22.7	453	5.00	Trans 1,2-dce
24.19	2269	0.0	0	0.00	
24.61	80111	26.0	521	5.00	Cis 1,2-dce
28.85	61530	26.0	519	5.00	1,1-dcpe
30.38	174389	25.2	504	5.00	Benzene
31.66	1002620	5.0	100	1.00	Flbenzene (IS)
33.60	92963	14.4	288	5.00	Tce
38.43	32048	23.6	472	5.00	Cis 1,3-dcpe
39.70	164638	23.5	470	5.00	Toluene
40.77	41615	22.7	454	5.00	Trans 1,3-dcpe
42.49	78352	24.3	485	5.00	Pce
44.58	1770	0.0	0	0.00	
45.61	170204	104.0	2080	50.00	1cl4fbz (surr)
46.16	171882	24.4	488	5.00	Chlorobenzene
46.41	156853	24.4	488	5.00	Ethylbenzene
46.73	351196	47.6	951	10.00	M/P Xylene
47.19	988076	5.0	100	1.00	1cl2flbz (IS)
48.58	141680	23.9	477	5.00	O Xylene
48.79	183093	25.2	504	5.00	Styrene
49.09	5649	0.0	0	0.00	
50.13	123099	23.7	473	5.00	Isopropylbenzene
51.83	131888	24.0	480	5.00	n-propylbenzene
51.98	183764	24.6	492	5.00	Bromobenzene
52.53	356600	47.6	953	10.00	1,3,5-tmb/2-cl tol
52.76	167725	23.9	478	5.00	4-cl toluene
54.00	103818	23.1	463	5.00	t-butylbenzene
54.16	161421	21.6	433	5.00	1,2,4-tmb
54.90	117813	22.9	458	5.00	s-butylbenzene
55.50	118312	23.3	465	5.00	p-isopropyltoluene
55.86	148359	24.5	490	5.00	1,3-dcb
56.34	148303	7.1	143	5.00	1,4-dcb
57.25	125639	19.8	395	5.00	n-butylbenzene
57.89	121488	23.1	463	5.00	1,2-dcb
60.17	1938	0.0	0	0.00	
63.31	1166	0.0	0	0.00	
64.19	82049	22.4	449	5.00	1,2,4-tcb
64.61	66740	10.5	211	5.00	Hexachlorobutadiene
65.01	102556	21.6	431	5.00	Napthalene
65.75	79157	11.2	224	5.00	1,2,3-tcb
67.24	1568	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.11
Method : c:\ezchrom\methods\lvoa0603.met
Sample ID : 5.0 ppb 11
Acquired : Jun 04, 1996 02:11:08
Printed : Jun 04, 1996 16:21:29

Channel B Results

Table with 6 columns: RT(min), pK Area, ng, Soil (µg/kg), Soln (µg/l), Compound. Lists various chemical compounds and their concentrations in soil and solution.

Continued...

File : c:\ezchrom\data1\160603.11
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 5.0 ppb 11
 Acquired : Jun 04, 1996 02:11:08
 Printed : Jun 04, 1996 16:21:29

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
35.85	165698	29.7	595	5.00	BRDICLMETHANE
36.07	139062	40.1	802	5.00	DIBROMOMETHANE
37.03	3485	0.0	0	0.00	
37.58	1045	0.0	0	0.00	
37.89	669	0.0	0	0.00	
38.50	171054	36.6	732	5.00	CIS 1,3-DCPE
39.38	2352	0.0	0	0.00	
39.77	327	0.0	0	0.00	
40.13	920	0.0	0	0.00	
40.83	143295	24.9	498	5.00	TRANS 1,3-DCPE
41.46	244518	29.9	598	5.00	1,1,2-TCA
42.57	481990	48.1	962	10.00	1,3 DCPA/PCE
43.61	115450	44.7	893	5.00	DIBRCLMETHANE
44.46	74594	82.7	1653	5.00	1,2-DBEA (EDB)
45.27	1268	0.0	0	0.00	
45.67	165099	69.8	1395	50.00	1CL4FBZ (SURR)
46.22	89735	29.9	598	5.00	CHLOROBENZENE
46.47	299859	21.7	434	5.00	1,1,1,2-PCA
47.26	833755	5.0	100	1.00	1CL2FBZ (IS)
48.35	2476	0.0	0	0.00	
48.57	2516	0.0	0	0.00	
49.02	1041	0.0	0	0.00	
50.32	50898	0.0	0	5.00	BROMOFORM
51.07	163510	27.2	544	5.00	1,1,2,2-PCA
51.68	122299	25.1	503	5.00	1,2,3-TCPA
52.10	51462	58.2	1163	5.00	BROMOBENZENE
52.61	83200	27.2	544	5.00	2-CL TOLUENE
52.83	124611	27.5	550	5.00	4-CL TOLUENE
53.90	955	0.0	0	0.00	
54.29	1951	0.0	0	0.00	
55.10	284	0.0	0	0.00	
55.29	662	0.0	0	0.00	
55.94	153415	29.9	597	5.00	1,3-DCB
56.40	165390	29.1	583	5.00	1,4-DCB
57.17	1721	0.0	0	0.00	
57.49	346	0.0	0	0.00	
57.96	142918	28.2	565	5.00	1,2-DCB
58.77	363	0.0	0	0.00	
58.92	727	0.0	0	0.00	
59.31	503	0.0	0	0.00	
60.53	834	0.0	0	0.00	
61.28	13237	0.0	0	5.00	1,2-DBr-3-CPA
61.64	2090	0.0	0	0.00	
62.05	1592	0.0	0	0.00	
62.28	391	0.0	0	0.00	
62.54	849	0.0	0	0.00	
62.86	697	0.0	0	0.00	

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McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.14
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 50.0 ppb 14
 Acquired : Jun 04, 1996 06:38:51
 Printed : Jun 04, 1996 16:23:16

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.15	1476	0.0	0	0.00	
5.71	1731516	306.9	6138	50.00	DCDFM
6.45	2161783	283.5	5670	50.00	CHLOROMETHANE
6.79	2493482	266.5	5330	50.00	VINYL CHLORIDE
8.27	757197	132.1	2641	50.00	BROMOMETHANE
8.58	2539849	273.8	5476	50.00	CHLOROETHANE
9.47	3317041	267.6	5353	50.00	TCFM
10.14	171753	0.0	0	0.00	
10.73	37308	0.0	0	0.00	
11.31	2381911	271.7	5434	50.00	FREON 113
12.24	3166348	242.3	4846	50.00	1,1-DCE
13.26	64518	0.0	0	0.00	
13.61	57594	0.0	0	0.00	
13.99	49005	0.0	0	0.00	
14.45	15680	0.0	0	0.00	
14.71	11034	0.0	0	0.00	
15.07	3939050	280.2	5605	50.00	METH CHLORIDE
15.65	161994	0.0	0	0.00	
16.00	64106	0.0	0	0.00	
16.21	32528	0.0	0	0.00	
16.39	26095	0.0	0	0.00	
16.78	3038942	257.6	5153	50.00	TRANS 1,2-DCE
17.74	75385	0.0	0	0.00	
18.14	59621	0.0	0	0.00	
18.69	49050	0.0	0	0.00	
19.39	22684	0.0	0	0.00	
19.65	8498	0.0	0	0.00	
20.23	3133934	280.8	5616	50.00	1,1-DCA
21.35	52634	0.0	0	0.00	
21.67	25485	0.0	0	0.00	
22.04	16907	0.0	0	0.00	
22.22	15119	0.0	0	0.00	
22.42	9304	0.0	0	0.00	
22.65	8084	0.0	0	0.00	
22.97	11745	0.0	0	0.00	
23.12	13099	0.0	0	0.00	
23.57	7133	0.0	0	0.00	
24.24	1948788	196.6	3932	50.00	2,2-DCPA
24.73	3206117	252.9	5058	50.00	CIS 1,2-DCE
25.74	3482859	259.1	5182	50.00	CHLOROFORM
26.76	1949757	271.2	5424	50.00	BCM
28.01	3397676	284.0	5681	50.00	1,1,1-TCA
28.94	2059825	249.5	4990	50.00	1,1-DCPE
29.33	3726311	272.4	5448	50.00	CARBON TET
30.63	2828483	256.8	5137	50.00	1,2-DCA

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File : c:\ezchrom\data1\160603.14
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 50.0 ppb 14
 Acquired : Jun 04, 1996 06:38:51
 Printed : Jun 04, 1996 16:23:16

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
31.46	11346	0.0	0	0.00	
31.68	42200	0.0	0	0.00	
32.38	561970	367.9	7359	50.00	2-CL ETH VI ETH
33.33	12571	0.0	0	0.00	
33.69	3463046	300.3	6006	50.00	TCE
34.69	2615501	238.7	4774	50.00	1,2-DCPA
35.06	156355	0.0	0	0.00	
35.83	2111797	383.2	7664	50.00	BRDICLMETHANE
36.05	1827426	352.5	7051	50.00	DIBROMOMETHANE
36.99	82431	0.0	0	0.00	
37.62	16331	0.0	0	0.00	
37.92	16902	0.0	0	0.00	
38.13	8840	0.0	0	0.00	
38.50	2160535	453.7	9075	50.00	CIS 1,3-DCPE
39.71	6125	0.0	0	0.00	
39.86	13585	0.0	0	0.00	
40.83	1933497	492.2	9845	50.00	TRANS 1,3-DCPE
41.47	2705916	289.0	5779	50.00	1,1,2-TCA
42.57	5553887	490.8	9816	100.00	1,3 DCPA/PCE
43.61	1739886	445.2	8904	50.00	DIBRCLMETHANE
44.44	1057973	255.9	5117	50.00	1,2-DBEA (EDB)
45.25	53954	0.0	0	0.00	
45.68	2312547	2796.4	55928	500.00	1CL4FBZ (SURR)
46.21	1183169	277.1	5542	50.00	CHLOROBENZENE
46.45	3279880	273.1	5462	50.00	1,1,1,2-PCA
47.25	898157	5.0	100	1.00	1CL2FBZ (IS)
47.81	18273	0.0	0	0.00	
48.17	4841	0.0	0	0.00	
48.30	5511	0.0	0	0.00	
48.55	7892	0.0	0	0.00	
49.14	5059	0.0	0	0.00	
49.79	1444	0.0	0	0.00	
50.27	919154	2438.9	48778	50.00	BROMOFORM
51.07	1962567	323.9	6478	50.00	1,1,2,2-PCA
51.68	1600807	343.8	6877	50.00	1,2,3-TCPA
52.05	844716	303.7	6074	50.00	BROMOBENZENE
52.61	1161457	265.8	5316	50.00	2-CL TOLUENE
52.81	1447081	295.2	5904	50.00	4-CL TOLUENE
53.85	21917	0.0	0	0.00	
54.31	86580	0.0	0	0.00	
55.14	4314	0.0	0	0.00	
55.35	7182	0.0	0	0.00	
55.92	1868222	301.1	6021	50.00	1,3-DCB
56.40	2072702	268.7	5374	50.00	1,4-DCB
57.34	8017	0.0	0	0.00	
57.48	12783	0.0	0	0.00	
57.95	1832706	273.1	5461	50.00	1,2-DCB

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File : c:\ezchrom\data1\160603.14
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 50.0 ppb 14
 Acquired : Jun 04, 1996 06:38:51
 Printed : Jun 04, 1996 16:23:16

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
59.33	9230	0.0	0	0.00	
59.53	7694	0.0	0	0.00	
59.99	5788	0.0	0	0.00	
60.27	1220	0.0	0	0.00	
60.49	2349	0.0	0	0.00	
60.69	1640	0.0	0	0.00	
60.87	1640	0.0	0	0.00	
61.27	357656	429.3	8585	50.00	1,2-DBr-3-CPA
61.99	7390	0.0	0	0.00	
62.22	5742	0.0	0	0.00	
62.52	870	0.0	0	0.00	
62.62	2435	0.0	0	0.00	
63.01	1154	0.0	0	0.00	
63.23	2801	0.0	0	0.00	
63.67	299	0.0	0	0.00	
63.92	15046	0.0	0	0.00	
64.24	1707193	292.9	5858	50.00	1,2,4-TCB
64.65	2215830	266.3	5326	50.00	HEXACLBUTADIENE
65.80	1247723	241.3	4825	50.00	1,2,3-TCB
66.93	6187	0.0	0	0.00	
67.22	2060	0.0	0	0.00	

Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:48

Channel : A

Peak : Vinyl Chloride

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0012	0.4	0.002921	0.0012							0
2	0.0019	0.5	0.003773	0.0019							0
3	0.0043	1	0.004251	0.0043							0
4	0.0152	5	0.003037	0.0152							0
5	0.0356	10	0.003562	0.0356							0
6	0.0841	25	0.003365	0.0841							0
7	0.1866	50	0.003733	0.1866							0

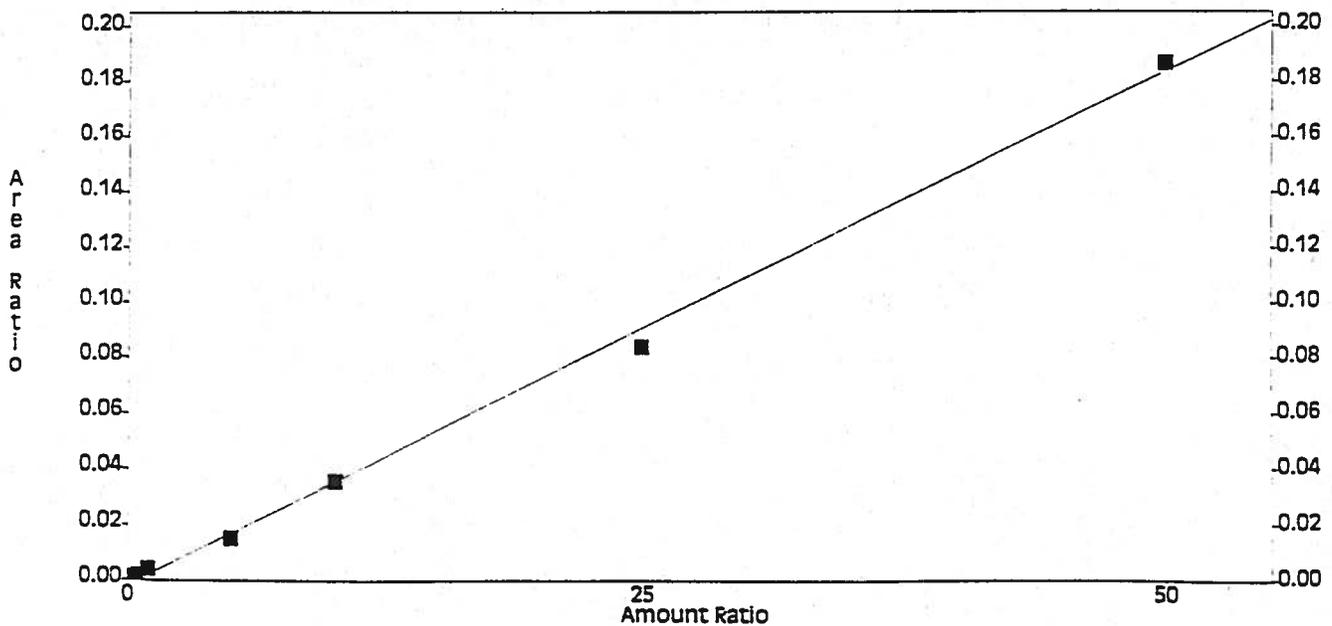
Calib Flag: Replace

Average RF: 0.00352035
 RF StdDev: 0.000458314
 RF %RSD: 13.019

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 269.998 x Area + 0.442919
 R² = 0.997564 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used

Printed : Jun 04, 1996 16:28:48

Channel : A

Peak : 1,1-dce

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0028	0.4	0.007017	0.0028							0
2	0.0034	0.5	0.006866	0.0034							0
3	0.0082	1	0.008167	0.0082							0
4	0.0470	5	0.009393	0.0470							0
5	0.0985	10	0.009849	0.0985							0
6	0.2385	25	0.009538	0.2385							0
7	0.4419	50	0.008839	0.4419							0

Calib Flag: Replace

Average RF: 0.00852408

RF StdDev: 0.0012102

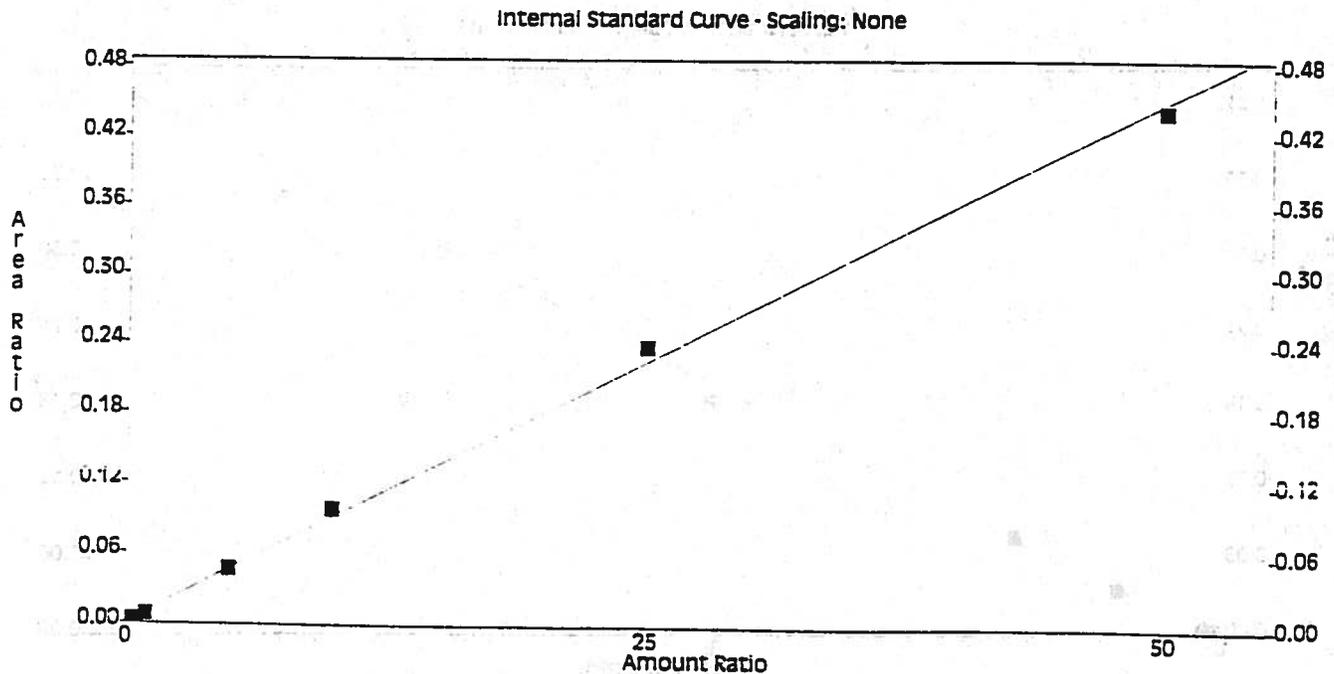
RF %RSD: 14.1974

RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 111.805 x Area - 0.292065
R² = 0.998227 ✓



Method : c:\ezchrom\methods\lvoa0603.met
 Printed : Jun 04, 1996 16:28:48
 Channel : A
 Peak : Mtbe

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0017	0.4	0.004262	0.0017							0
2	0.0025	0.5	0.004979	0.0025							0
3	0.0060	1	0.006038	0.0060							0
4	0.0354	5	0.00708	0.0354							0
5	0.0783	10	0.007826	0.0783							0
6	0.1855	25	0.007421	0.1855							0
7	0.4093	50	0.008186	0.4093							0

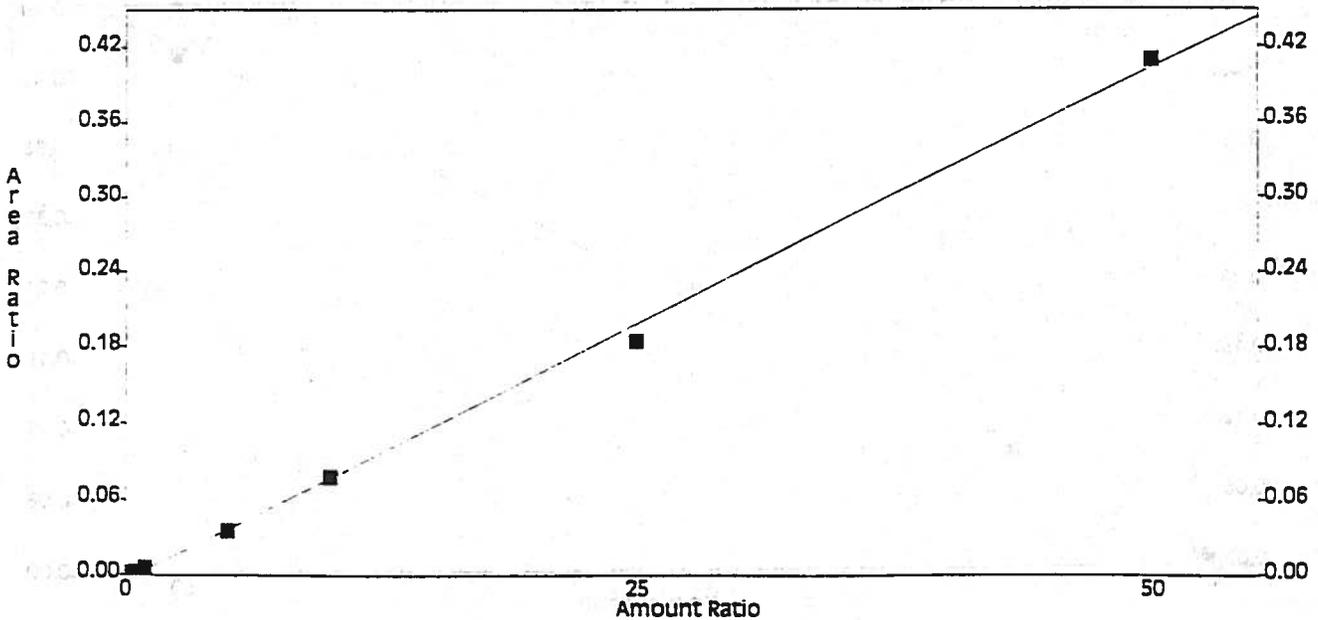
Calib Flag: Replace

Average RF: 0.00654174
 RF StdDev: 0.00148937
 RF %RSD: 22.7672

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 122.7 x Area + 0.530414
 R² = 0.998139 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:54

Channel : A

Peak : M/P Xylene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0273	0.8	0.03415	0.0273							0
2	0.0278	1	0.0278	0.0278							0
3	0.0695	2	0.03474	0.0695							0
4	0.3554	10	0.03554	0.3554							0
5	0.7841	20	0.03921	0.7841							0
6	1.8957	50	0.03791	1.8957							0
7	3.8960	100	0.03896	3.8960							0

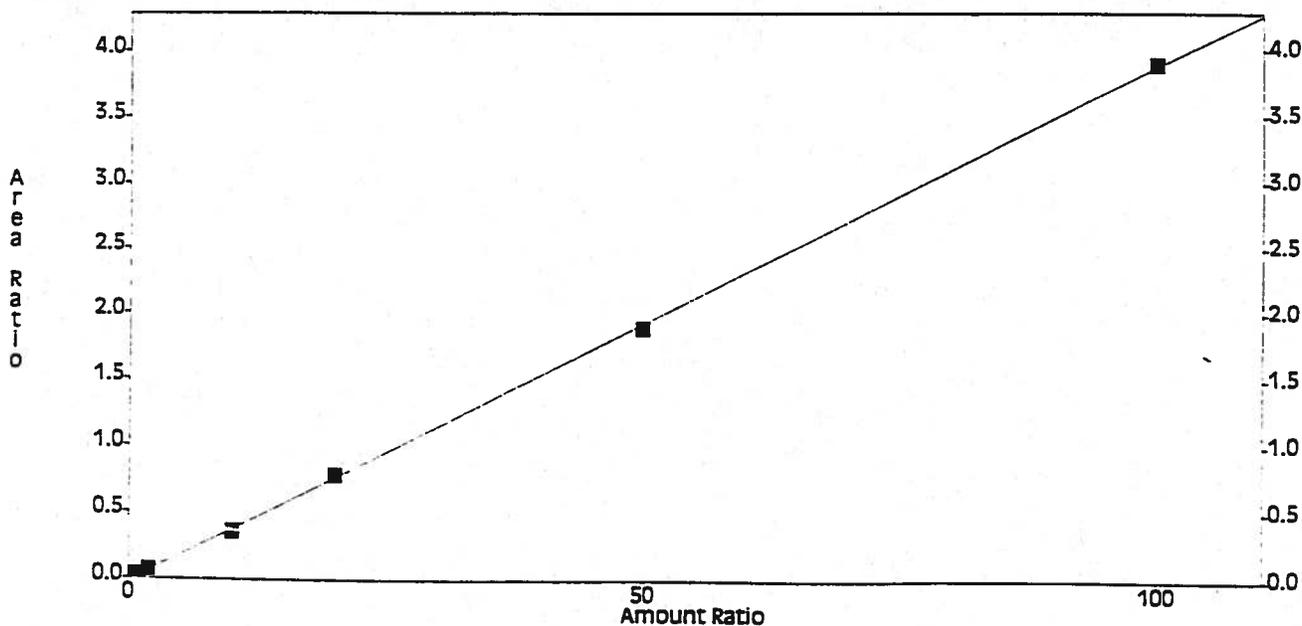
Calib Flag: Replace

Average RF: 0.0354745
RF StdDev: 0.00394037
RF %RSD: 11.1076

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 25.6726 x Area + 0.379525
R² = 0.999793 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:53

Channel : A

Peak : Chlorobenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0130	0.4	0.03259	0.0130							0
2	0.0144	0.5	0.02881	0.0144							0
3	0.0337	1	0.03372	0.0337							0
4	0.1740	5	0.03479	0.1740							0
5	0.3855	10	0.03855	0.3855							0
6	0.9440	25	0.03776	0.9440							0
7	1.9889	50	0.03978	1.9889							0

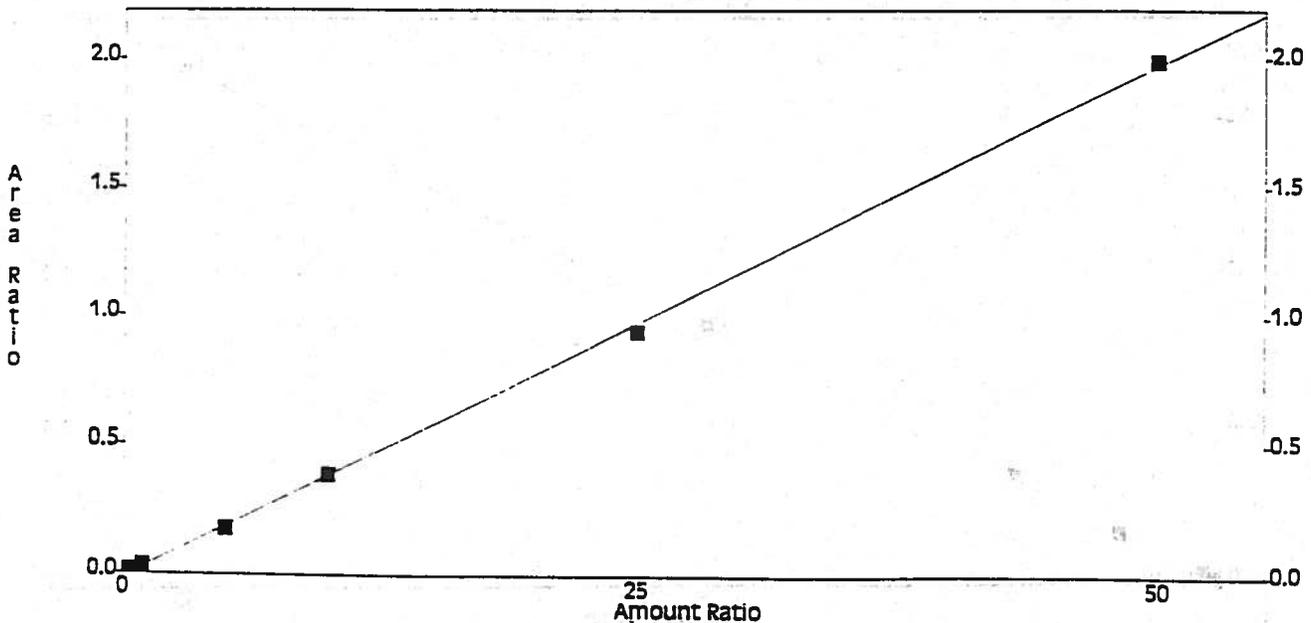
Calib Flag: Replace

Average RF: 0.0351417
 RF StdDev: 0.00384596
 RF %RSD: 10.9441

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 25.1799 x Area + 0.346183
 R² = 0.999414

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

Printed : Jun 04, 1996 16:28:54

Channel : A

Peak : Ethylbenzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0114	0.4	0.02859	0.0114							0
2	0.0120	0.5	0.02404	0.0120							0
3	0.0300	1	0.03003	0.0300							0
4	0.1587	5	0.03175	0.1587							0
5	0.3544	10	0.03544	0.3544							0
6	0.8432	25	0.03373	0.8432							0
7	1.6653	50	0.03331	1.6653							0

Calib Flag: Replace

Average RF: 0.0309827

RF StdDev: 0.00383398

RF %RSD: 12.3746

RF Definition: Area / Amount

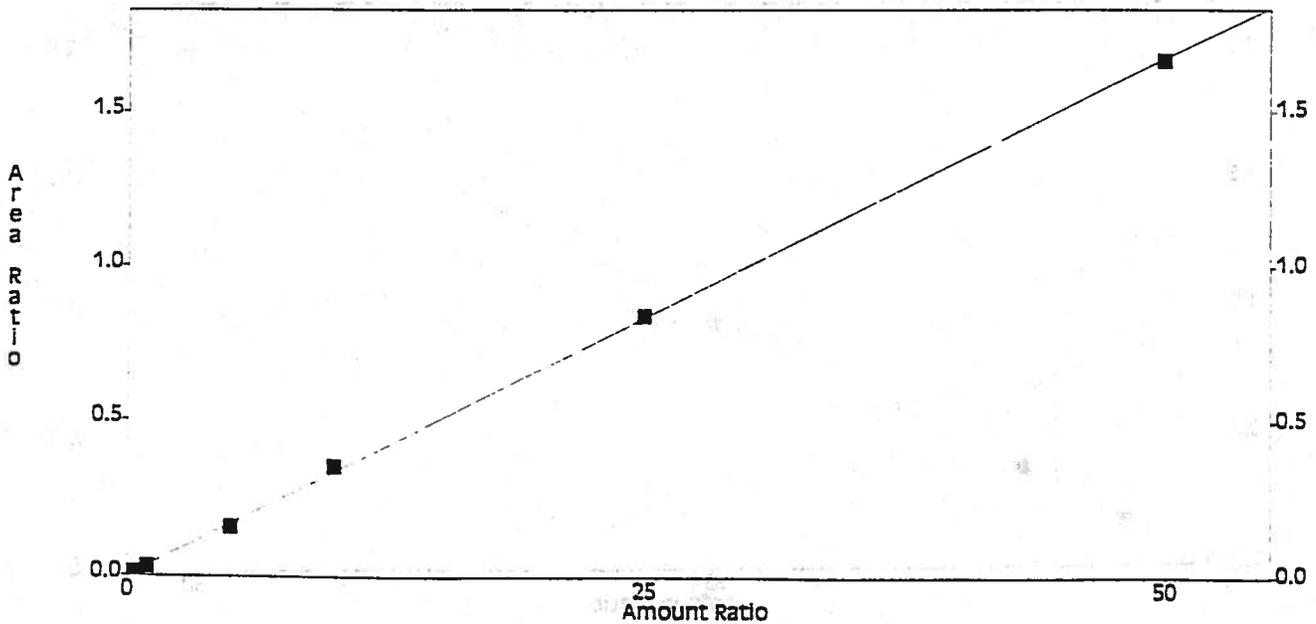
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 29.9102 x Area - 0.0108068

R² = 0.999735 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:53

Channel : A

Peak : Pce

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0061	0.4	0.01513	0.0061							0
2	0.0062	0.5	0.01245	0.0062							0
3	0.0153	1	0.0153	0.0153							0
4	0.0793	5	0.01586	0.0793							0
5	0.1800	10	0.018	0.1800							0
6	0.4405	25	0.01762	0.4405							0
7	0.9033	50	0.01807	0.9033							0

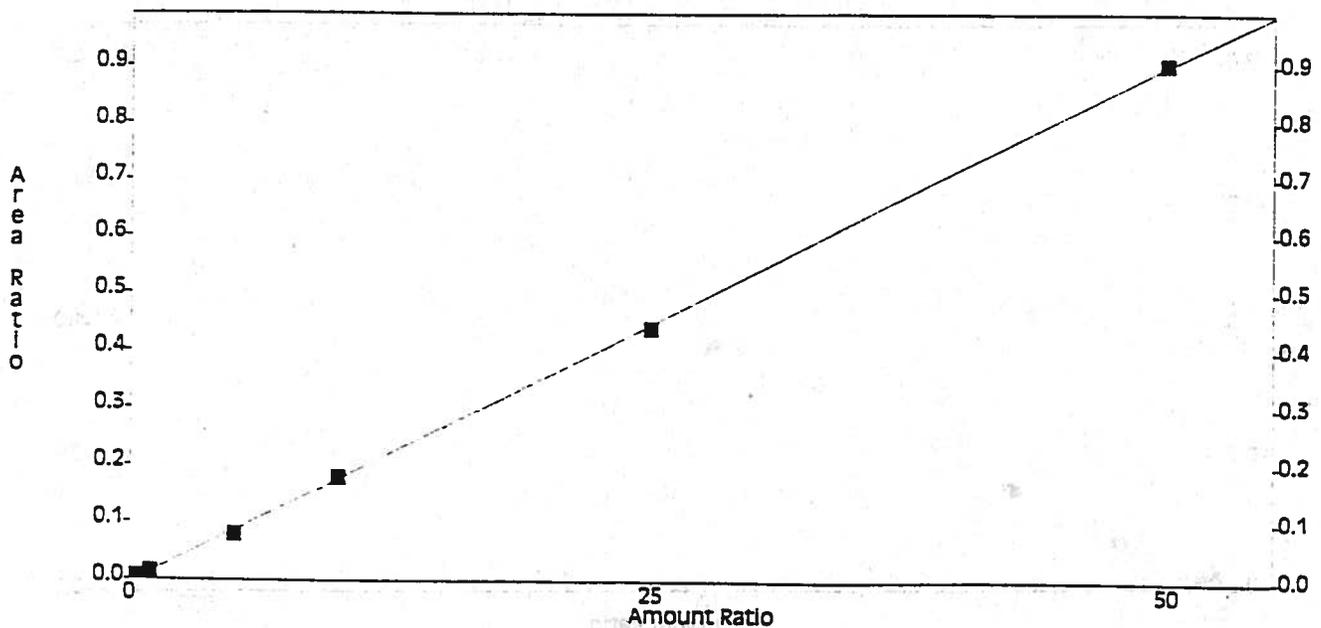
Calib Flag: Replace

Average RF: 0.0160591
 RF StdDev: 0.00203097
 RF %RSD: 12.6468

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 55.2767 x Area + 0.252142
 R² = 0.999795

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met
 Printed : Jun 04, 1996 16:28:53
 Channel : A
 Peak : 1c14fbz (surr)

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0158	4	0.003948	0.0158							0
2	0.0429	5	0.00859	0.0429							0
3	0.0372	10	0.003719	0.0372							0
4	0.1723	50	0.003445	0.1723							0
5	0.3775	100	0.003775	0.3775							0
6	0.9212	250	0.003685	0.9212							0
7	1.9507	500	0.003901	1.9507							0

Calib Flag: Replace

Average RF: 0.00443758

RF StdDev: 0.00133333

RF %RSD: 41.4256

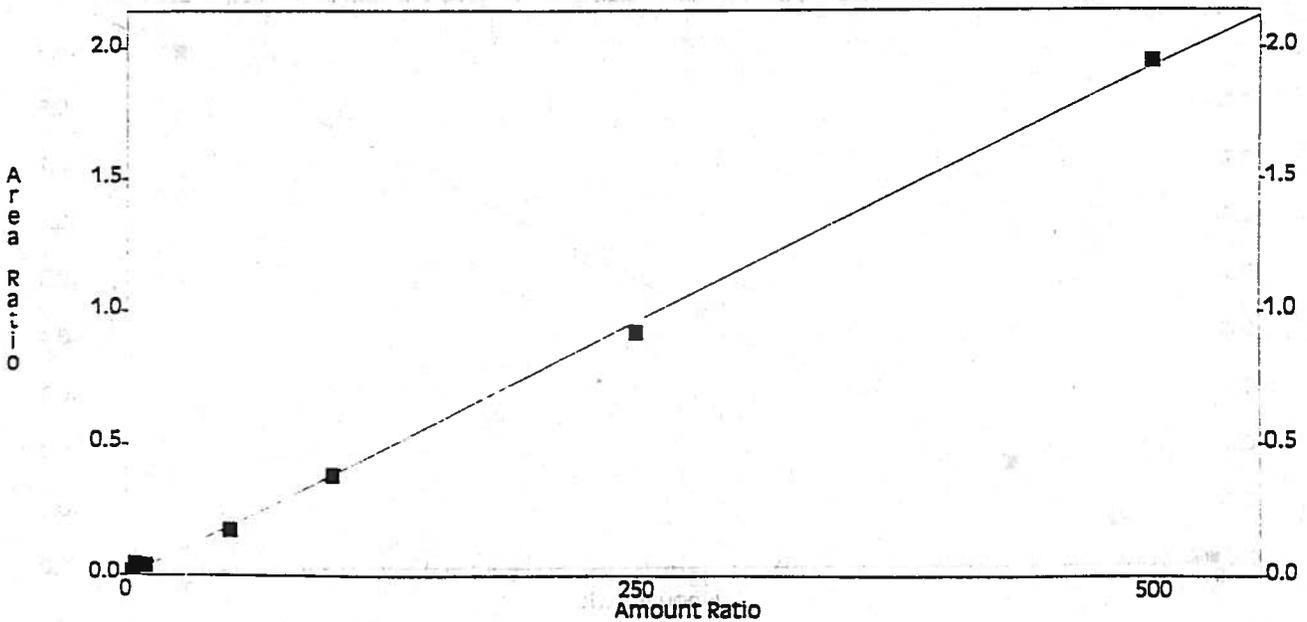
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 258.287/x Area + 1.49094
 $R^2 = 0.99893$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:52

Channel : A

Peak : Toluene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0127	0.4	0.03175	0.0127							0
2	0.0144	0.5	0.02875	0.0144							0
3	0.0334	1	0.03345	0.0334							0
4	0.1666	5	0.03332	0.1666							0
5	0.3704	10	0.03704	0.3704							0
6	0.9100	25	0.0364	0.9100							0
7	1.9187	50	0.03837	1.9187							0

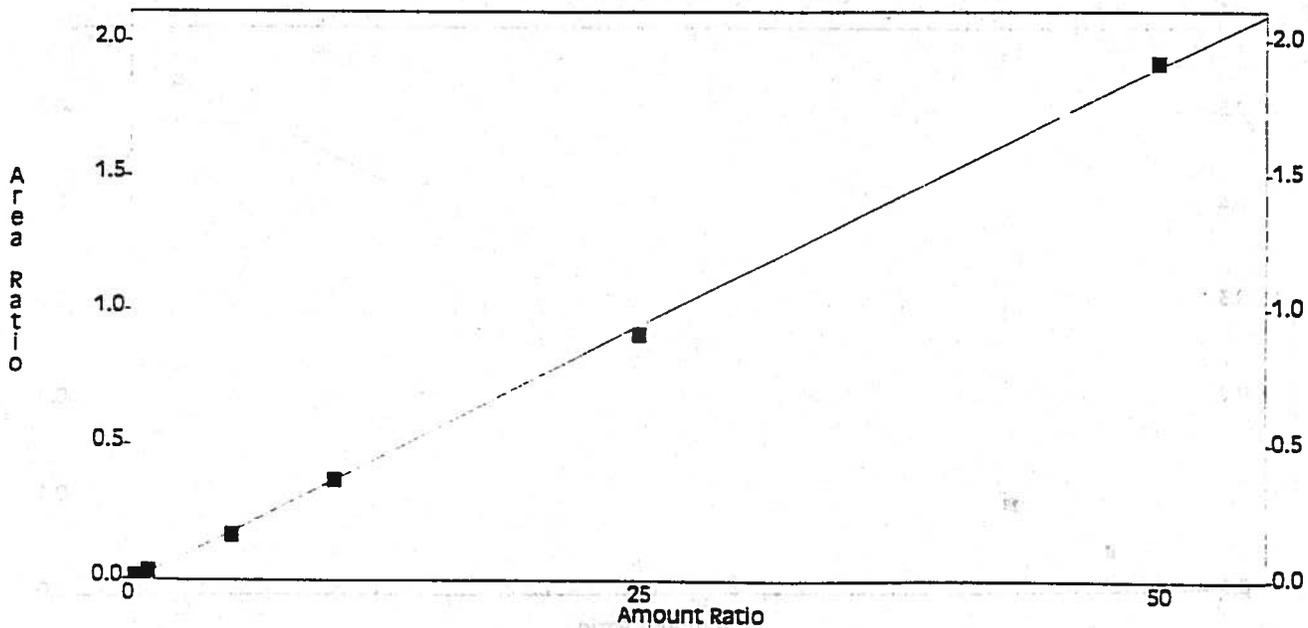
Calib Flag: Replace

Average RF: 0.0341559
RF StdDev: 0.00335036
RF %RSD: 9.80904

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 26.1044 x Area + 0.35123
R² = 0.999383 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:52

Channel : A

Peak : Trans 1,3-dcpe

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0029	0.4	0.00723	0.0029							0
2	0.0025	0.5	0.004907	0.0025*							0
3	0.0079	1	0.007891	0.0079							0
4	0.0421	5	0.008423	0.0421							0
5	0.0905	10	0.00905	0.0905							0
6	0.1284	25	0.005134	0.1284*							0
7	0.5345	50	0.01069	0.5345							0

Calib Flag: Replace

Average RF: 0.00865699

RF StdDev: 0.00131986

RF %RSD: 15.2462

RF Definition: Area / Amount

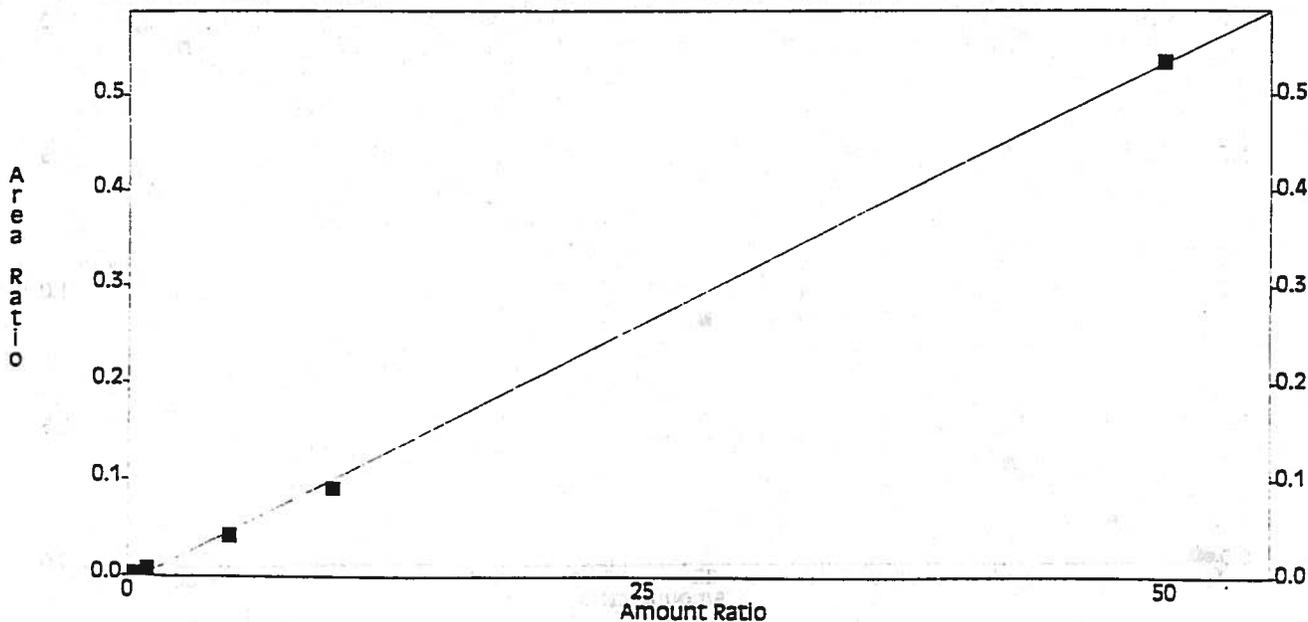
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 92.4658 x Area + 0.742914

R² = 0.999114 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:51

Channel : A

Peak : Tce

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0073	0.4	0.01822	0.0073							0
2	0.0093	0.5	0.01851	0.0093							0
3	0.0278	1	0.02776	0.0278							0
4	0.0941	5	0.01882	0.0941							0
5	0.2153	10	0.02153	0.2153							0
6	0.5214	25	0.02086	0.5214							0
7	1.0824	50	0.02165	1.0824							0

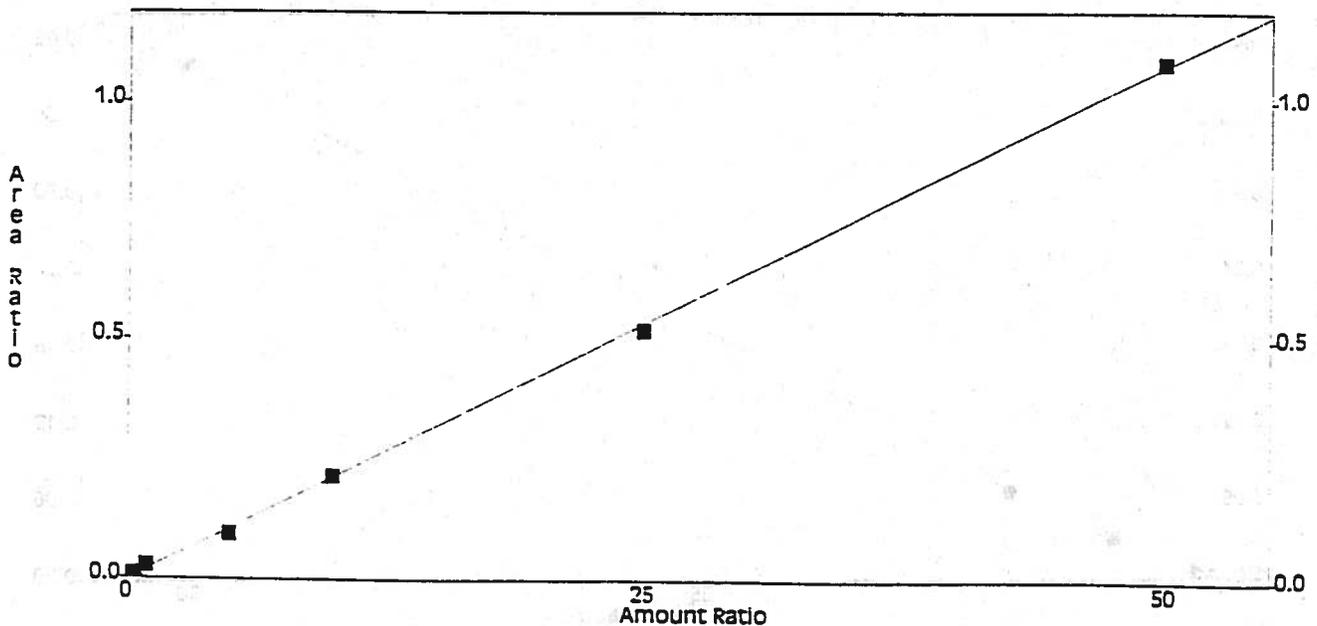
Calib Flag: Replace

Average RF: 0.0210492
RF StdDev: 0.00329565
RF %RSD: 15.6569

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 46.3309 x Area + 0.172363
R² = 0.999499 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:51

Channel : A

Peak : Cis 1,3-dcpe

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0021	0.4	0.005147	0.0021							0
2	0.0017	0.5	0.003495	0.0017*							0
3	0.0058	1	0.005776	0.0058							0
4	0.0324	5	0.006487	0.0324							0
5	0.0691	10	0.006911	0.0691							0
6	0.1006	25	0.004024	0.1006*							0
7	0.4027	50	0.008054	0.4027							0

Calib Flag: Replace

Average RF: 0.00647482

RF StdDev: 0.00111064

RF %RSD: 17.1532

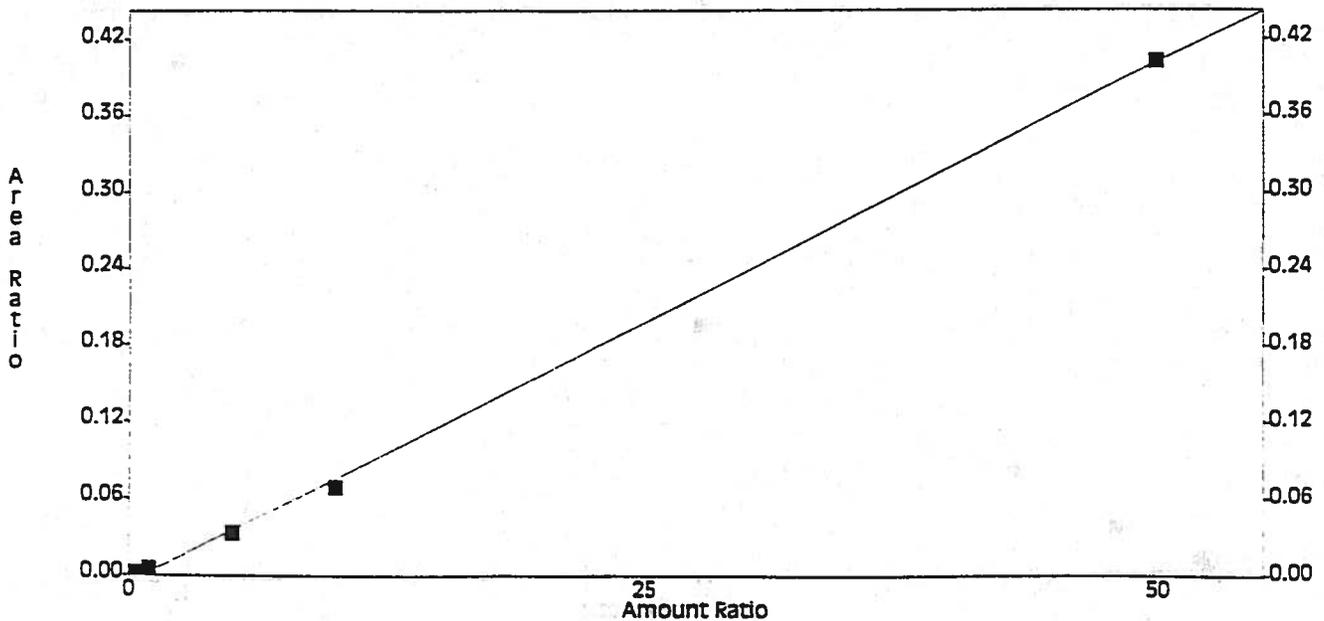
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 122.807 x Area + 0.703117
R² = 0.999279 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:50

Channel : A

Peak : 1,1-dcpe

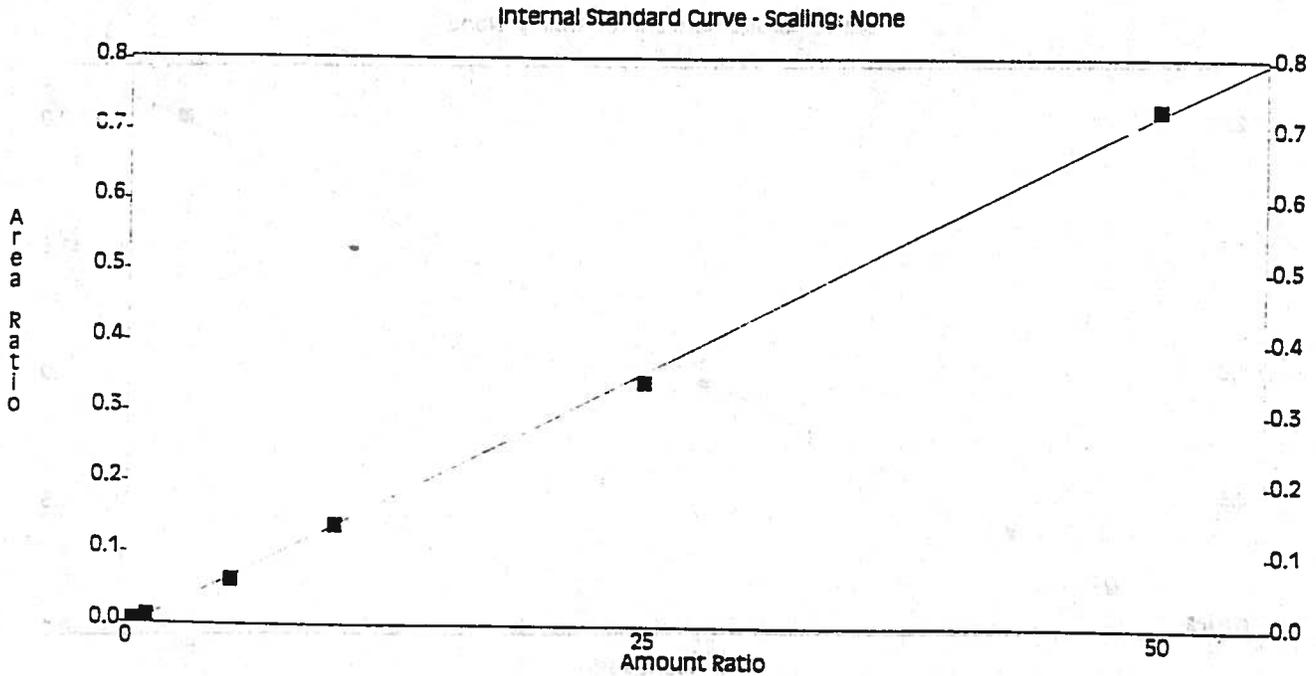
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0043	0.4	0.01064	0.0043							0
2	0.0051	0.5	0.01026	0.0051							0
3	0.0114	1	0.01141	0.0114							0
4	0.0623	5	0.01245	0.0623							0
5	0.1402	10	0.01402	0.1402							0
6	0.3452	25	0.01381	0.3452							0
7	0.7312	50	0.01462	0.7312							0

Calib Flag: Replace

Average RF: 0.0124582
 RF StdDev: 0.00174094
 RF %RSD: 13.9743

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 68.4476 x Area + 0.421153
 R² = 0.999296 ✓



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used
 Printed : Jun 04, 1996 16:28:50
 Channel : A
 Peak : Benzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0125	0.4	0.03134	0.0125							0
2	0.0157	0.5	0.03147	0.0157							0
3	0.0336	1	0.03363	0.0336							0
4	0.1765	5	0.0353	0.1765							0
5	0.3988	10	0.03988	0.3988							0
6	0.9725	25	0.0389	0.9725							0
7	2.0324	50	0.04065	2.0324							0

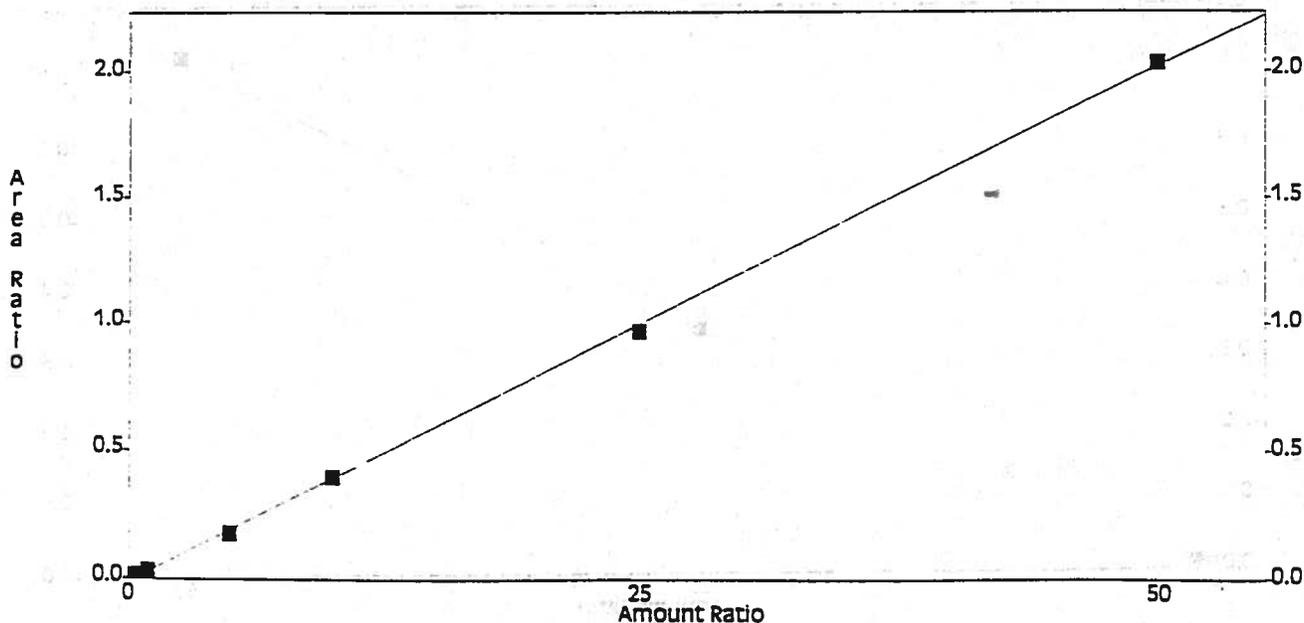
Calib Flag: Replace

Average RF: 0.0358798
 RF StdDev: 0.00394466
 RF %RSD: 10.9941

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 24.6162 x Area + 0.32087
 R² = 0.999551 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:49

Channel : A

Peak : Trans 1,2-dce

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0056	0.4	0.01405	0.0056							0
2	0.0085	0.5	0.01705	0.0085							0
3	0.0178	1	0.01784	0.0178							0
4	0.0883	5	0.01767	0.0883							0
5	0.1950	10	0.0195	0.1950							0
6	0.4566	25	0.01826	0.4566							0
7	0.9877	50	0.01975	0.9877							0

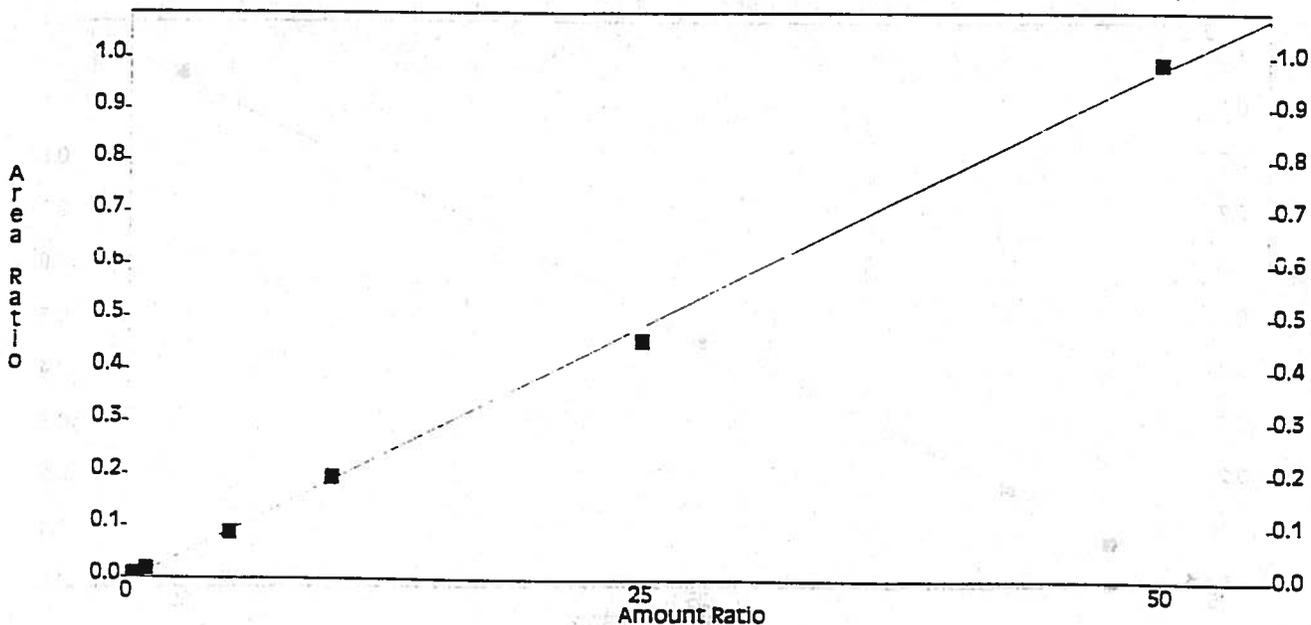
Calib Flag: replace

Average RF: 0.017732
RF StdDev: 0.00189602
RF %RSD: 10.6926

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 50.9111 x Area + 0.330731
R² = 0.998694 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met
 Printed : Jun 04, 1996 16:28:49
 Channel : A
 Peak : Cis 1,2-dce

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0054	0.4	0.01351	0.0054							0
2	0.0069	0.5	0.01378	0.0069							0
3	0.0148	1	0.01482	0.0148							0
4	0.0811	5	0.01622	0.0811							0
5	0.1866	10	0.01866	0.1866							0
6	0.4576	25	0.0183	0.4576							0
7	0.9693	50	0.01939	0.9693							0

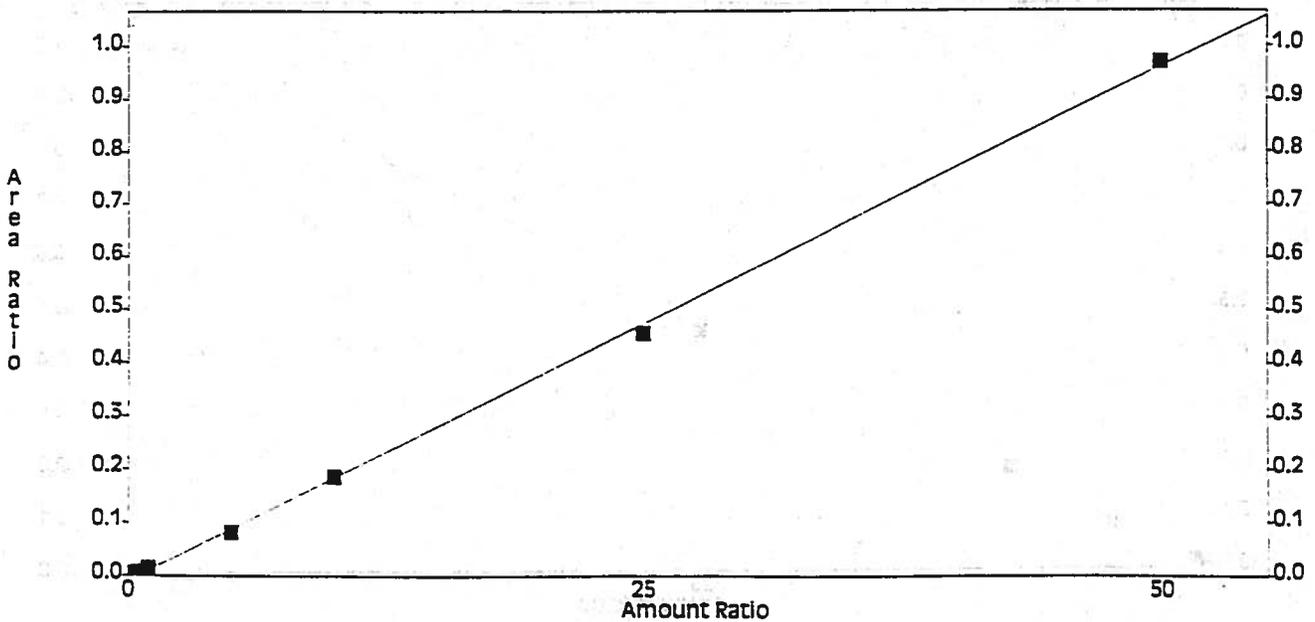
Calib Flag: Replace

Average RF: 0.0163832
 RF StdDev: 0.00242882
 RF %RSD: 14.8251

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 51.6097 x Area + 0.434616
 $R^2 = 0.999273$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:55

Channel : A

Peak : O Xylene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0108	0.4	0.02709	0.0108							0
2	0.0115	0.5	0.02308	0.0115							0
3	0.0281	1	0.02808	0.0281							0
4	0.1434	5	0.02868	0.1434							0
5	0.3190	10	0.0319	0.3190							0
6	0.7785	25	0.03114	0.7785							0
7	1.6487	50	0.03297	1.6487							0

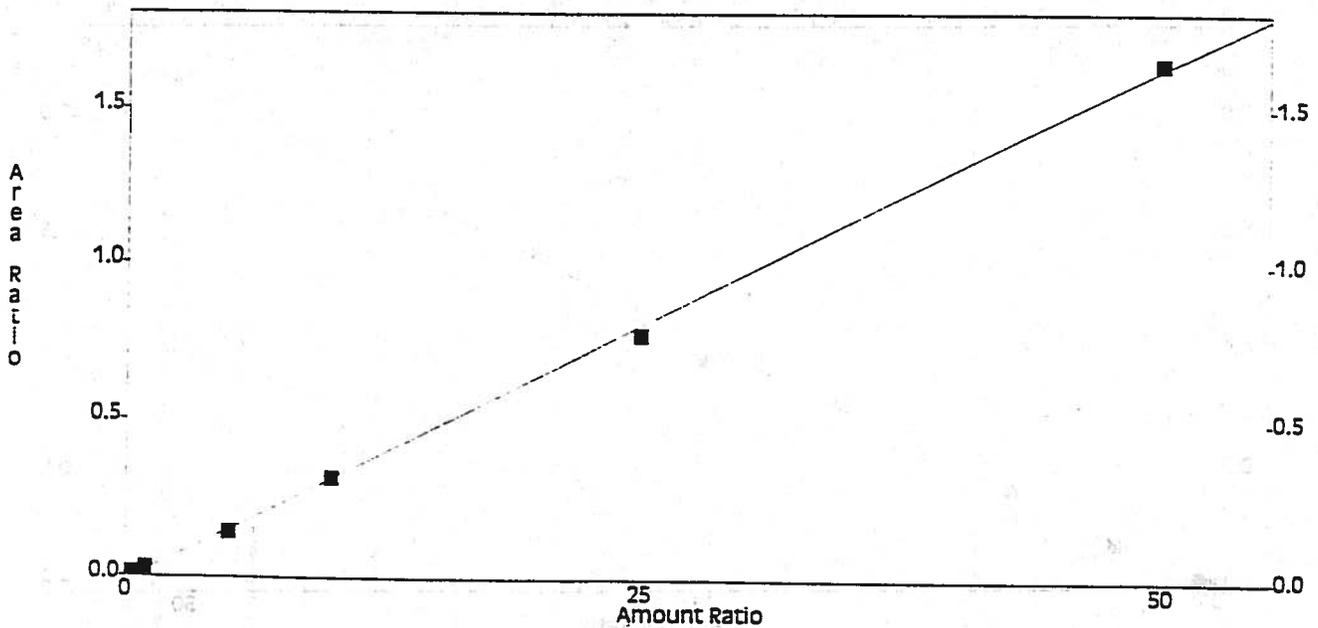
Calib Flag: Replace

Average RF: 0.0289919
 RF StdDev: 0.00337712
 RF %RSD: 11.6485

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 30.3882 x Area + 0.365234
 R² = 0.999299 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:55

Channel : A

Peak : Styrene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0142	0.4	0.03556	0.0142							0
2	0.0149	0.5	0.0298	0.0149							0
3	0.0351	1	0.0351	0.0351							0
4	0.1853	5	0.03706	0.1853							0
5	0.4239	10	0.04239	0.4239							0
6	0.9779	25	0.03912	0.9779							0
7	2.1744	50	0.04349	2.1744							0

Calib Flag: Replace

Average RF: 0.0375016

RF StdDev: 0.00468077

RF %RSD: 12.4815

RF Definition: Area / Amount

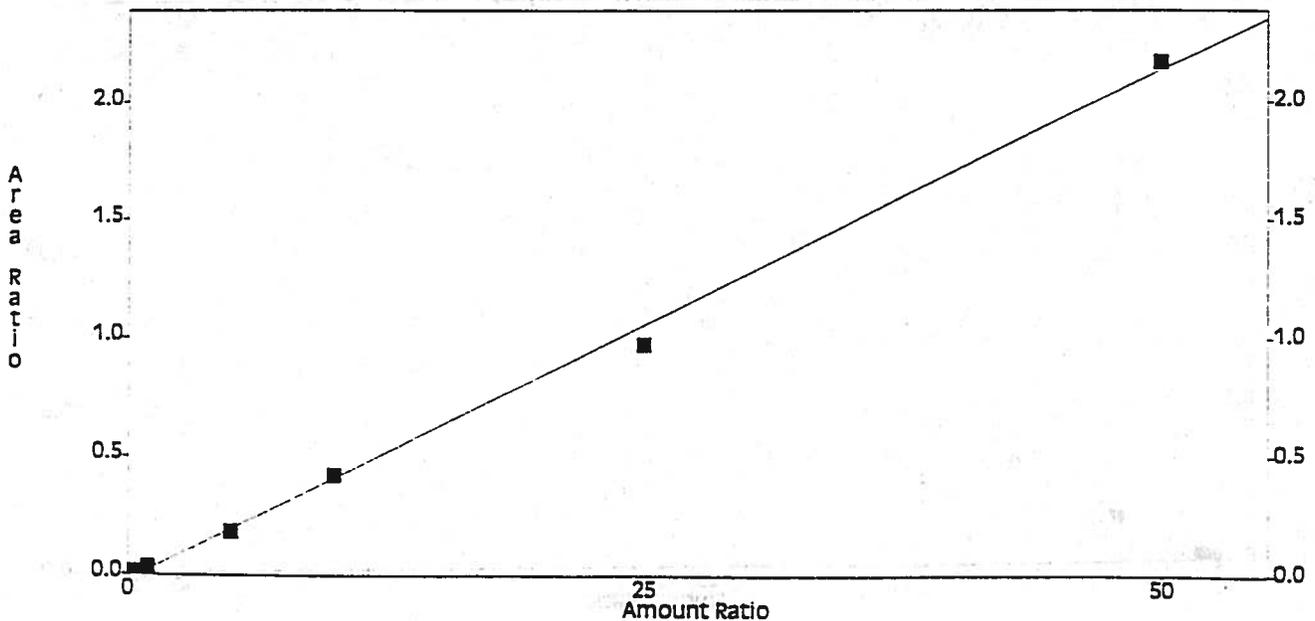
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 23.1432 x Area + 0.480026

R² = 0.997699 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:56

Channel : A

Peak : Isopropylbenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0097	0.4	0.02413	0.0097*							0
2	0.0094	0.5	0.01881	0.0094							0
3	0.0243	1	0.02427	0.0243							0
4	0.1246	5	0.02492	0.1246							0
5	0.2752	10	0.02752	0.2752							0
6	0.6631	25	0.02652	0.6631							0
7	1.3800	50	0.0276	1.3800							0

Calib Flag: Replace

Average RF: 0.0249402

RF StdDev: 0.0032961

RF %RSD: 13.216

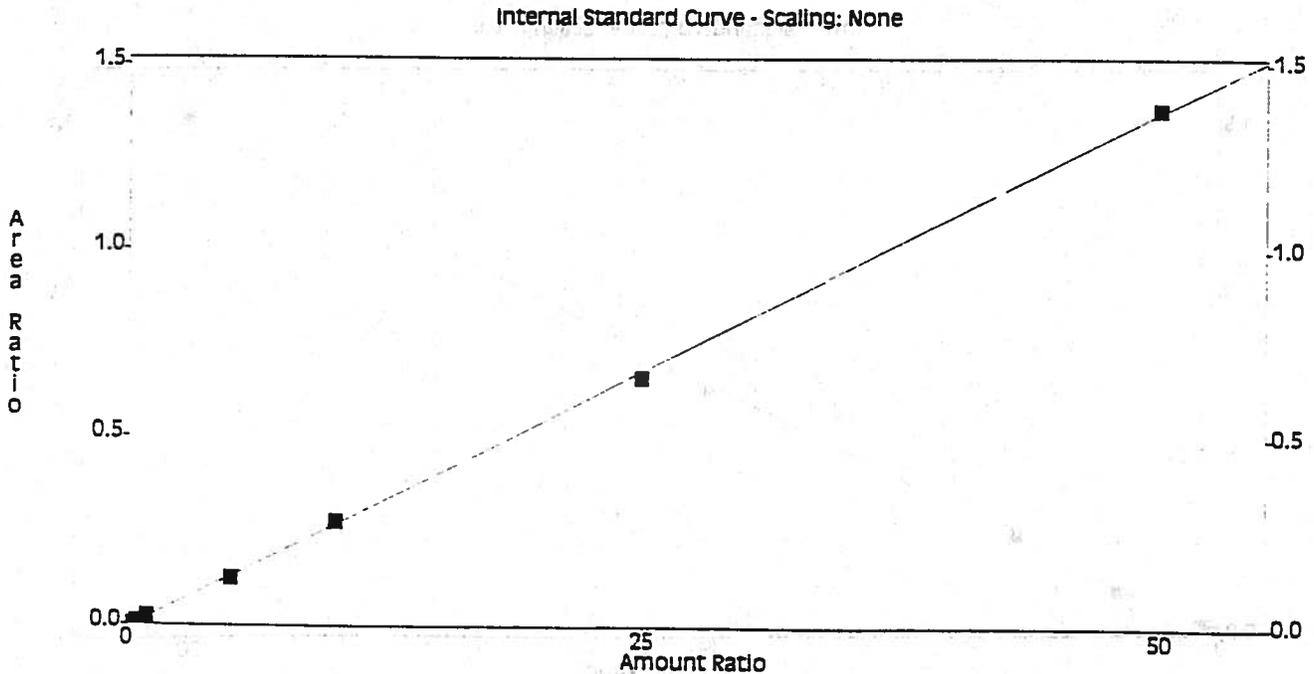
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 36.2229 x Area + 0.298069

R² = 0.999619



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:56

Channel : A

Peak : n-propylbenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0104	0.4	0.02588	0.0104							0
2	0.0094	0.5	0.01874	0.0094							0
3	0.0253	1	0.02533	0.0253							0
4	0.1335	5	0.0267	0.1335							0
5	0.2953	10	0.02953	0.2953							0
6	0.7145	25	0.02858	0.7145							0
7	1.5188	50	0.03038	1.5188							0

Calib Flag: Replace

Average RF: 0.0277321

RF StdDev: 0.00206158

RF %RSD: 7.43391

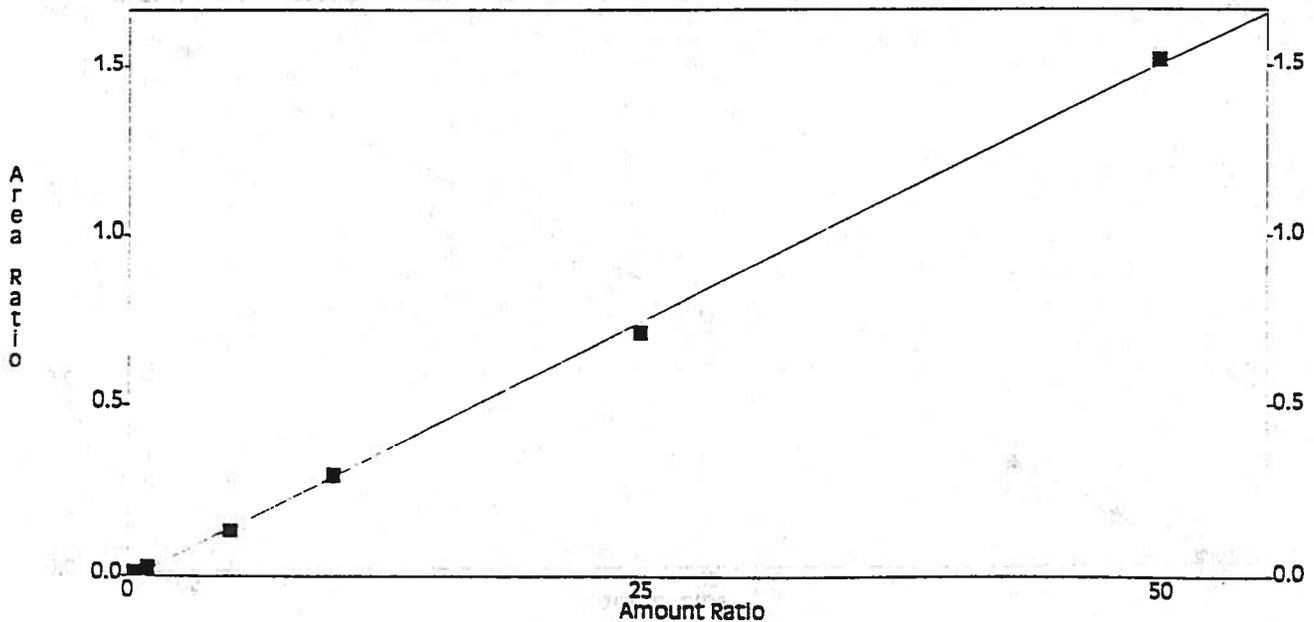
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 32.9566 x/Area + 0.414968
R² = 0.999171 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:57

Channel : A

Peak : Bromobenzene

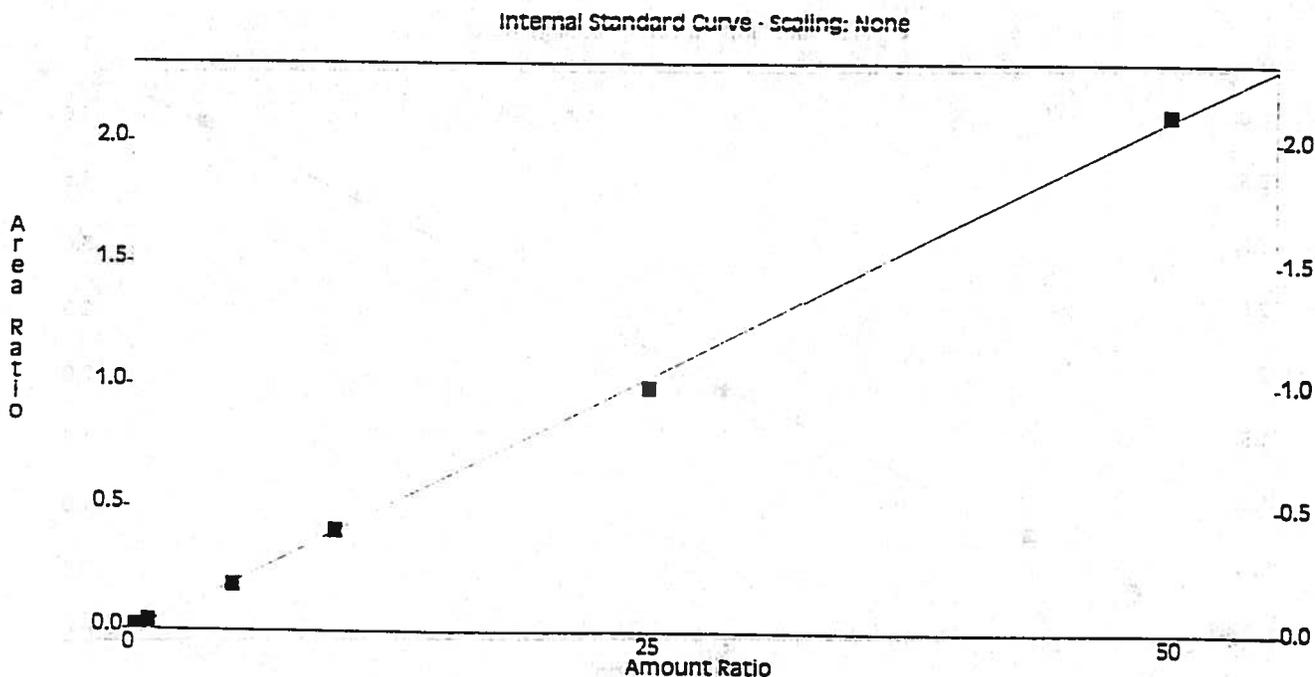
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0134	0.4	0.03341	0.0134							0
2	0.0162	0.5	0.03233	0.0162							0
3	0.0359	1	0.03591	0.0359							0
4	0.1860	5	0.0372	0.1860							0
5	0.4106	10	0.04106	0.4106							0
6	0.9974	25	0.0399	0.9974							0
7	2.1116	50	0.04223	2.1116							0

Calib Flag: Replace

Average RF: 0.0374344
RF StdDev: 0.00380377
RF %RSD: 10.1612

RF Definition: Area / Amount
Weighting Method: None
Int Through Zero: No

Linear Fit: Amount = 23.7363 x Area + 0.341451
R² = 0.999313



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:57

Channel : A

Peak : 1,3,5-tmb/2-cl tol

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0281	0.8	0.03515	0.0281							0
2	0.0273	1	0.02732	0.0273							0
3	0.0701	2	0.03504	0.0701							0
4	0.3609	10	0.03609	0.3609							0
5	0.7967	20	0.03983	0.7967							0
6	1.9114	50	0.03823	1.9114							0
7	3.9807	100	0.03981	3.9807							0

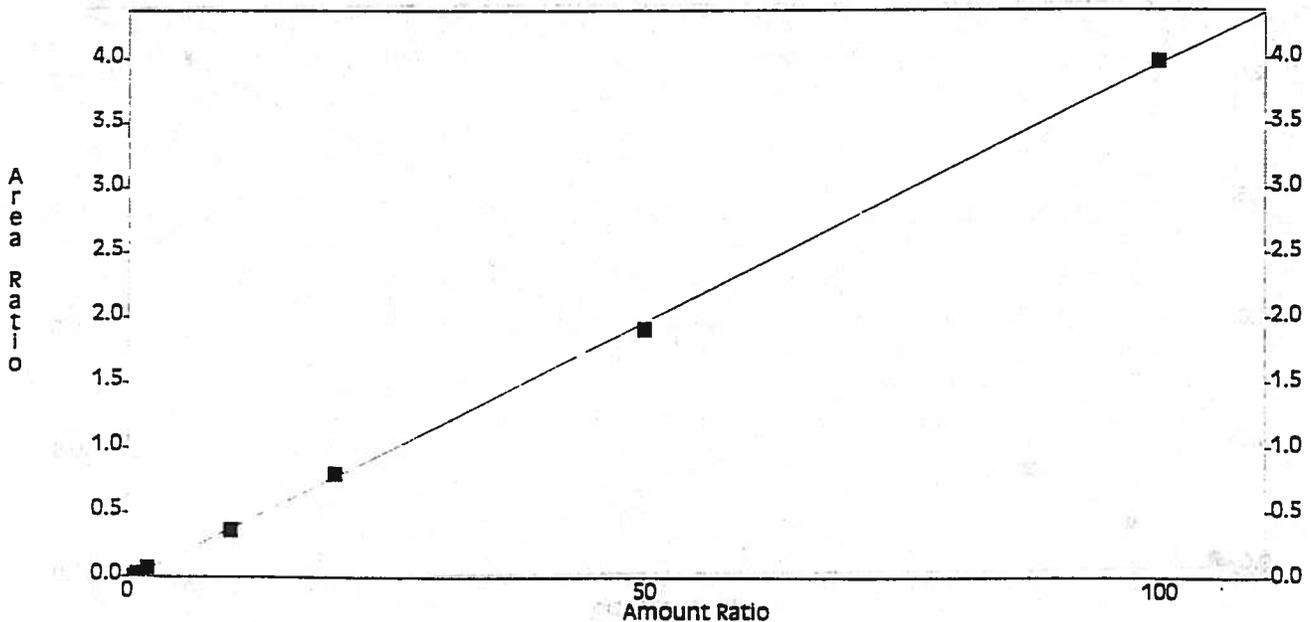
Calib Flag: Replace

Average RF: 0.0360534
RF StdDev: 0.00469728
n: 13

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 25.1237 x Area + 0.573637
R² = 0.9996 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met
 Printed : Jun 04, 1996 16:28:58
 Channel : A
 Peak : 4-cl toluene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0129	0.4	0.03228	0.0129							0
2	0.0136	0.5	0.02728	0.0136							0
3	0.0332	1	0.03325	0.0332							0
4	0.1697	5	0.03395	0.1697							0
5	0.3773	10	0.03773	0.3773							0
6	0.9104	25	0.03642	0.9104							0
7	1.9229	50	0.03846	1.9229							0

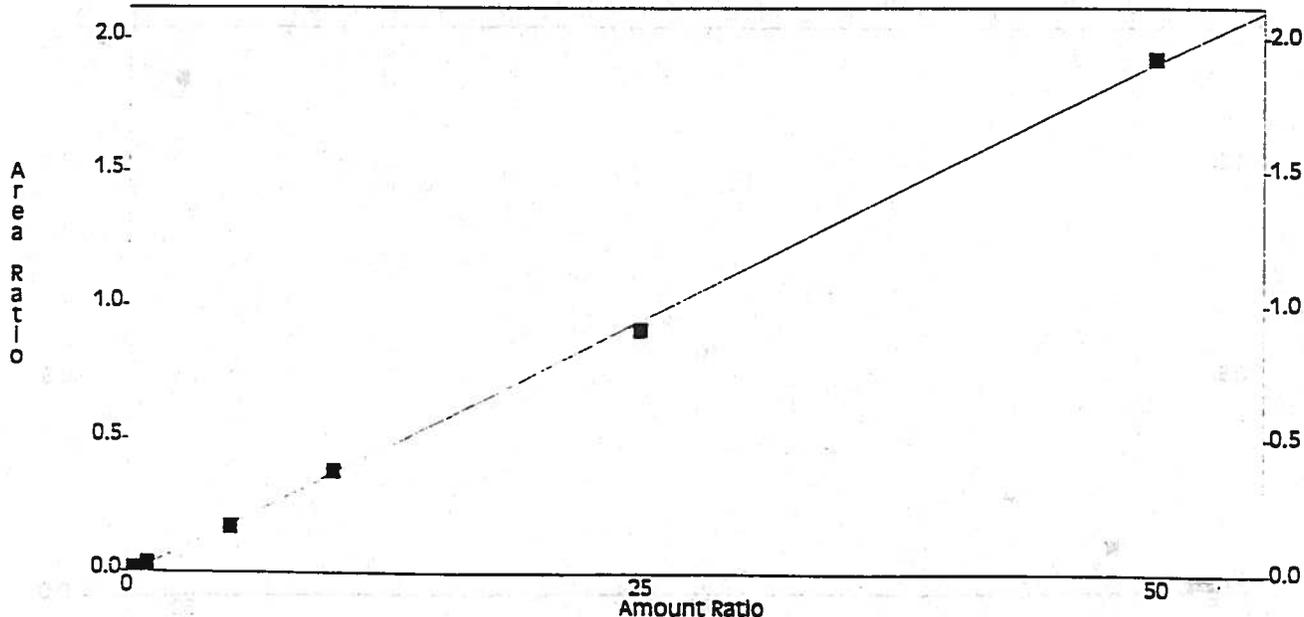
Calib Flag: Replace

Average RF: 0.034194
 RF StdDev: 0.00383027
 RF %RSD: 11.2016

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 26.0634 x Area + 0.319861
 $R^2 = 0.999355$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:58

Channel : A

Peak : t-butylbenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0084	0.4	0.02109	0.0084*							0
2	0.0078	0.5	0.01569	0.0078							0
3	0.0208	1	0.02081	0.0208							0
4	0.1051	5	0.02101	0.1051							0
5	0.2330	10	0.0233	0.2330							0
6	0.5668	25	0.02267	0.5668							0
7	1.2065	50	0.02413	1.2065							0

Calib Flag: Replace

Average RF: 0.0212693

RF StdDev: 0.00302231

RF %RSD: 14.2097

RF Definition: Area / Amount

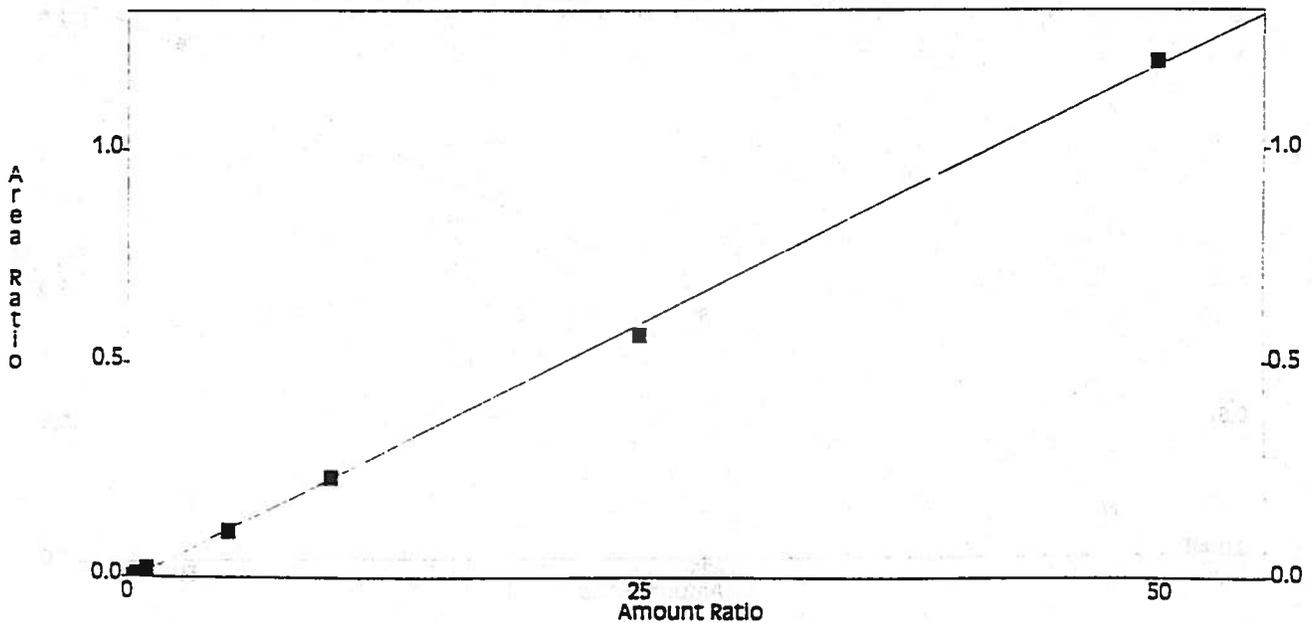
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 41.4481 x Area + 0.466984

$R^2 = 0.999164$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:59

Channel : A

Peak : 1,2,4-tmb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0135	0.4	0.03372	0.0135							0
2	0.0136	0.5	0.02724	0.0136							0
3	0.0348	1	0.03483	0.0348							0
4	0.1634	5	0.03267	0.1634							0
5	0.3550	10	0.0355	0.3550							0
6	0.8534	25	0.03414	0.8534							0
7	1.8123	50	0.03625	1.8123							0

Calib Flag: Replace

Average RF: 0.0334781

F StdDev: 0.00298882

RF %RSD: 8.9277

RF Definition: Area / Amount

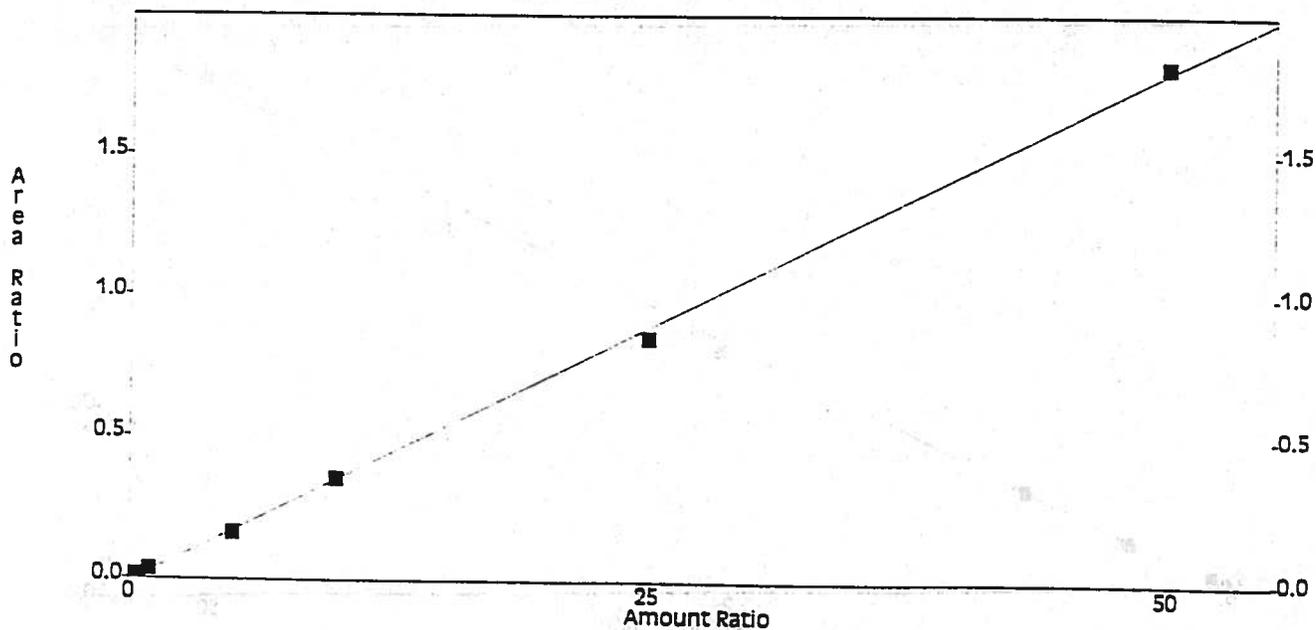
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 27.706 x Area + 0.280732

R² = 0.999219 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:28:59

Channel : A

Peak : s-butylbenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0096	0.4	0.024	0.0096*							0
2	0.0088	0.5	0.0176	0.0088							0
3	0.0237	1	0.02372	0.0237							0
4	0.1192	5	0.02385	0.1192							0
5	0.2602	10	0.02602	0.2602							0
6	0.6355	25	0.02542	0.6355							0
7	1.3631	50	0.02726	1.3631							0

Calib Flag: Replace

Average RF: 0.0239794

RF StdDev: 0.00339802

RF %RSD: 14.1706

RF Definition: Area / Amount

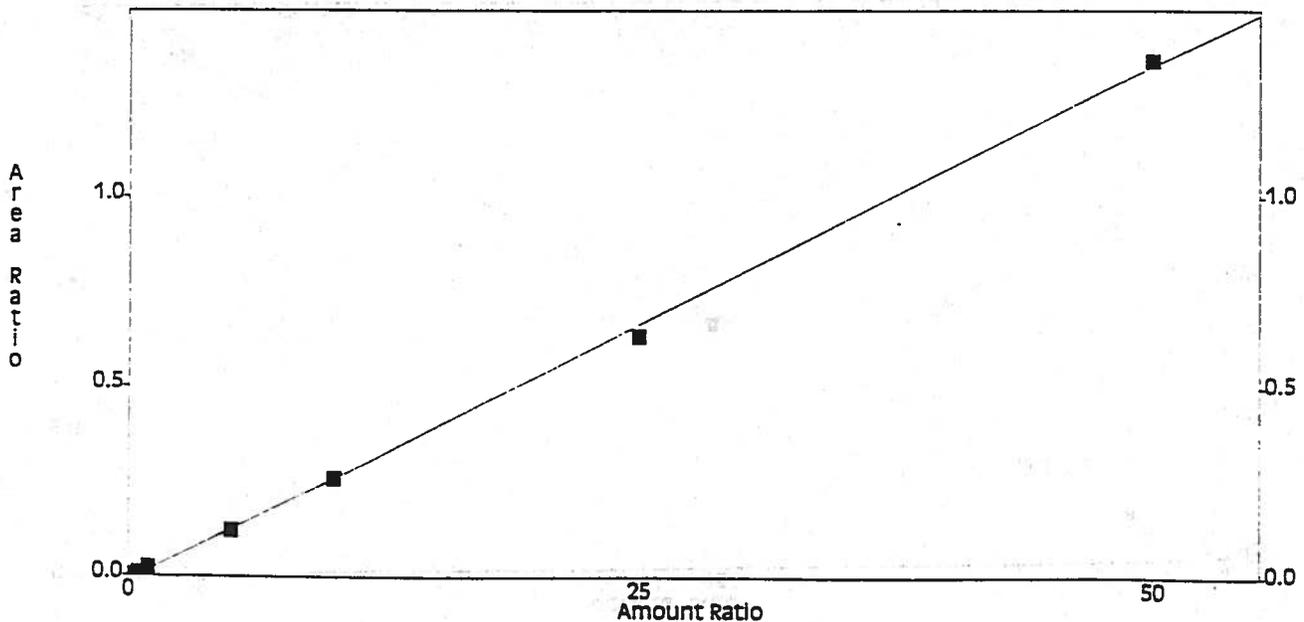
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 36.7066 x Area + 0.502866

R² = 0.998964 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:00

Channel : A

Peak : p-isopropyltoluene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0097	0.4	0.02427	0.0097*							0
2	0.0091	0.5	0.01826	0.0091							0
3	0.0238	1	0.02376	0.0238							0
4	0.1197	5	0.02395	0.1197							0
5	0.2616	10	0.02616	0.2616							0
6	0.6381	25	0.02552	0.6381							0
7	1.3642	50	0.02728	1.3642							0

Calib Flag: Replace

Average RF: 0.0241576

RF StdDev: 0.00318113

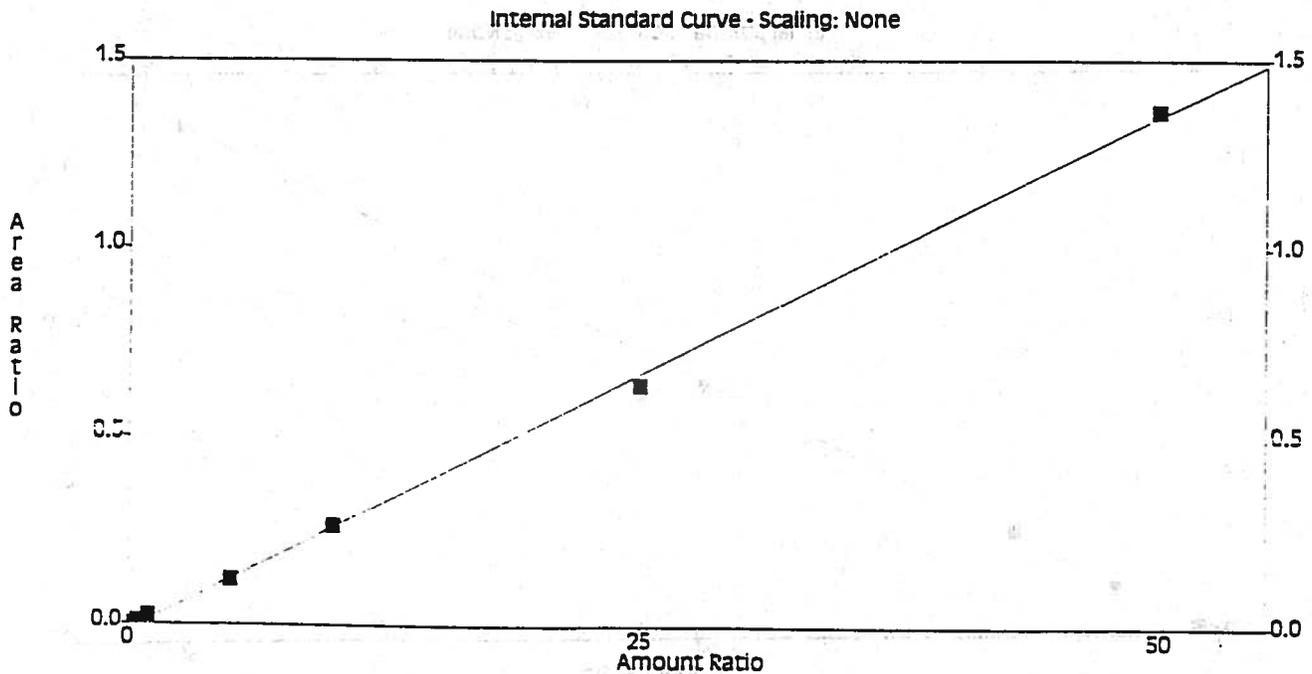
RF %RSD: 13.1682

RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 36.6762 x Area + 0.478246
 $R^2 = 0.999052$ ✓



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:00

Channel : A

Peak : 1,3-dcb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0118	0.4	0.02944	0.0118							0
2	0.0105	0.5	0.02097	0.0105*							0
3	0.0281	1	0.02806	0.0281							0
4	0.1501	5	0.03003	0.1501							0
5	0.3325	10	0.03325	0.3325							0
6	0.7989	25	0.03196	0.7989							0
7	1.6316	50	0.03263	1.6316							0

Calib Flag: Replace

Average RF: 0.0308949

RF StdDev: 0.00202999

RF %RSD: 6.57062

RF Definition: Area / Amount

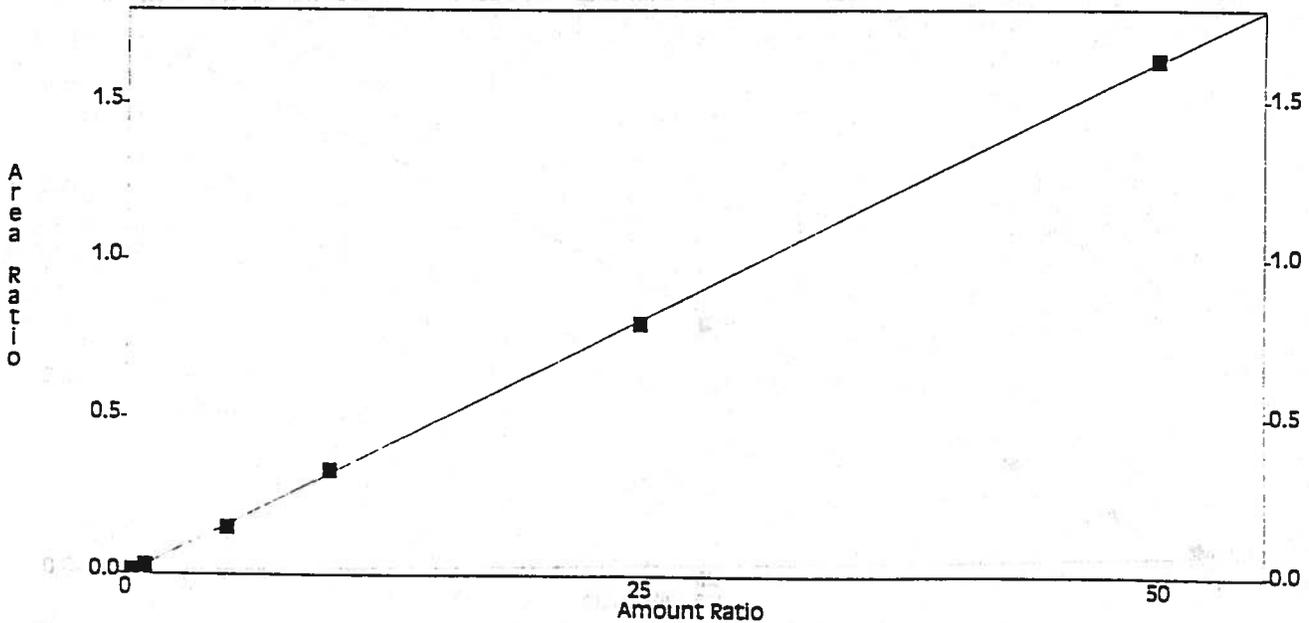
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 30.6295 x Area + 0.158584

R² = 0.999813

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:01

Channel : A

Peak : 1,4-dcb

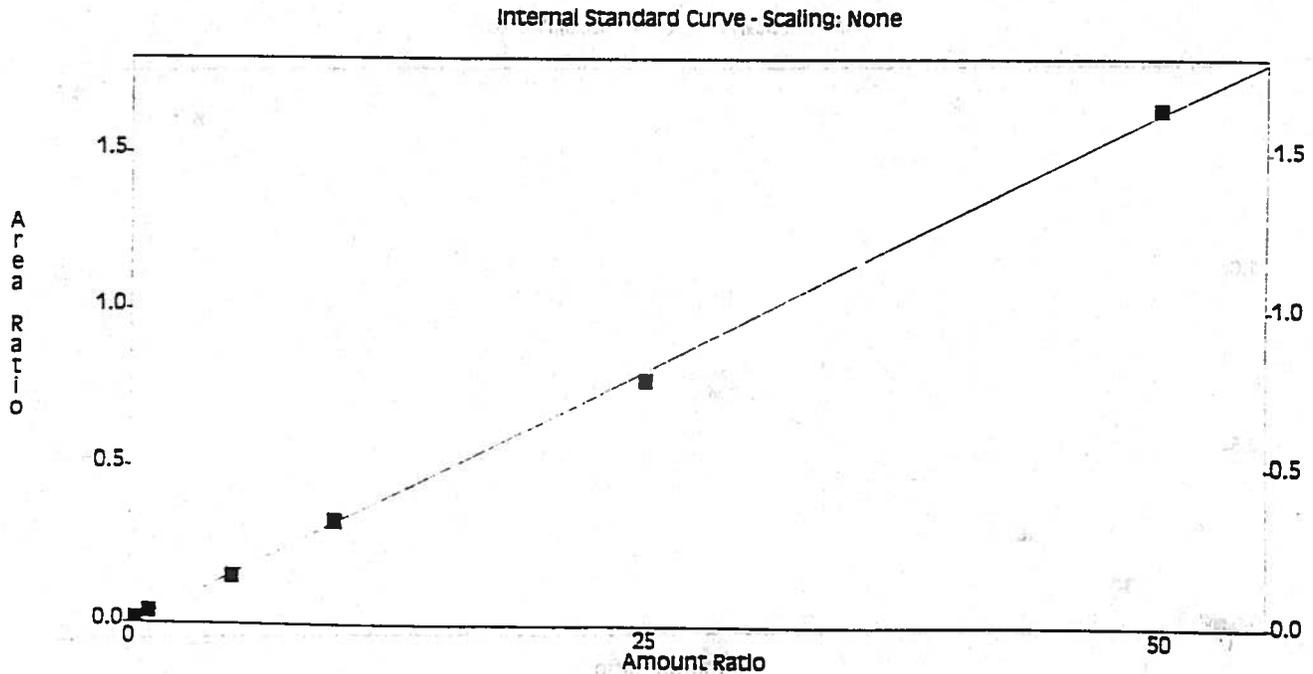
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0152	0.4	0.03805	0.0152							0
2	0.0490	0.5	0.09792	0.0490							0
3	0.0387	1	0.03871	0.0387							0
4	0.1501	5	0.03002	0.1501							0
5	0.3261	10	0.03261	0.3261							0
6	0.7797	25	0.03119	0.7797							0
7	1.6392	50	0.03278	1.6392							0

Calib Flag: Replace

Average RF: 0.0338937
RF StdDev: 0.00362448
RF %RSD: 10.6937

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 30.6587 x Area + 0.164095
R² = 0.999301



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:01

Channel : A

Peak : n-butylbenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0114	0.4	0.02843	0.0114							0
2	0.0097	0.5	0.01936	0.0097*							0
3	0.0285	1	0.02852	0.0285							0
4	0.1272	5	0.02543	0.1272							0
5	0.2731	10	0.02731	0.2731							0
6	0.6734	25	0.02694	0.6734							0
7	1.4361	50	0.02872	1.4361							0

Calib Flag: Replace

Average RF: 0.0275565

RF StdDev: 0.00126526

RF %RSD: 4.59152

RF Definition: Area / Amount

Weighting Method: None

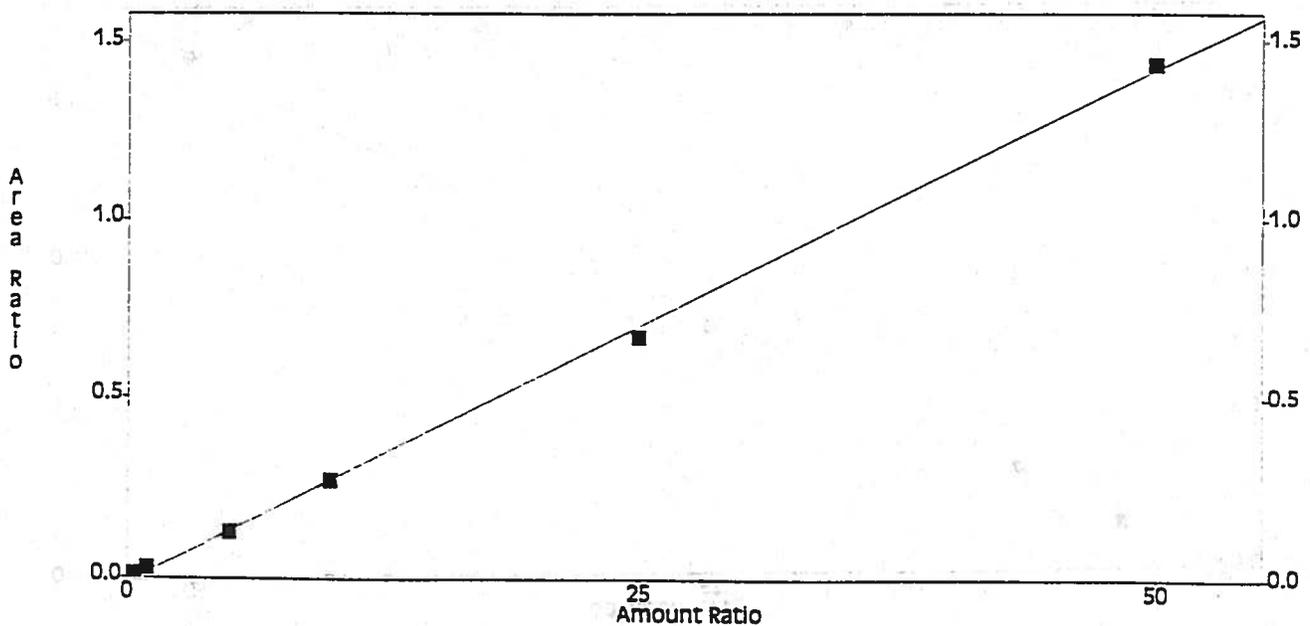
Fit Through Zero: No

Linear Fit: Amount = 34.906 x Area + 0.400675

R² = 0.999019



Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used

Printed : Jun 04, 1996 16:29:01

Channel : A

Peak : 1,2-dcb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic	STD	Replic	%RSD	Old Area Ratio
1	0.0113	0.4	0.02833	0.0113*									0
2	0.0108	0.5	0.02163	0.0108									0
3	0.0257	1	0.02572	0.0257									0
4	0.1230	5	0.02459	0.1230									0
5	0.2654	10	0.02654	0.2654									0
6	0.6372	25	0.02549	0.6372									0
7	1.3344	50	0.02669	1.3344									0

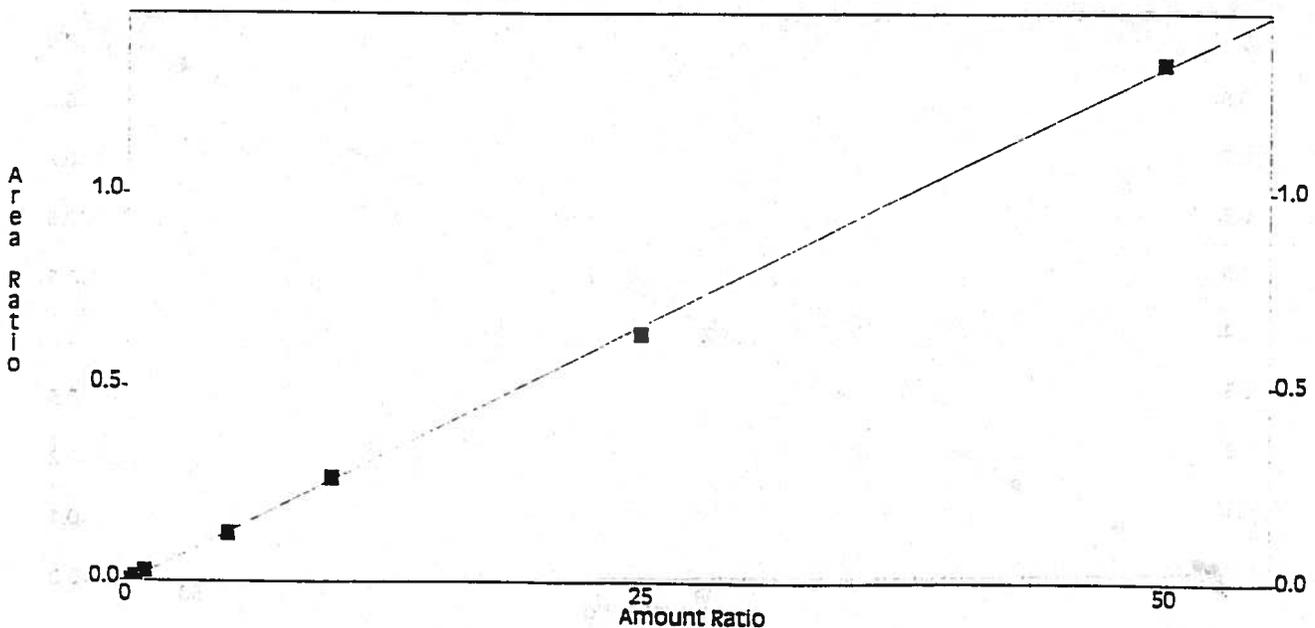
Calib Flag: Replace

Average RF: 0.0251089
RF StdDev: 0.00186718
RF %RSD: 7.43631

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 37.5461 x Area + 0.25373
R² = 0.999493 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:02

Channel : A

Peak : 1,2,4-tcb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0051	0.4	0.01269	0.0051							0
2	0.0028	0.5	0.005647	0.0028*							0
3	0.0140	1	0.01405	0.0140							0
4	0.0830	5	0.01661	0.0830							0
5	0.1541	10	0.01541	0.1541							0
6	0.4087	25	0.01635	0.4087							0
7	0.8693	50	0.01739	0.8693							0

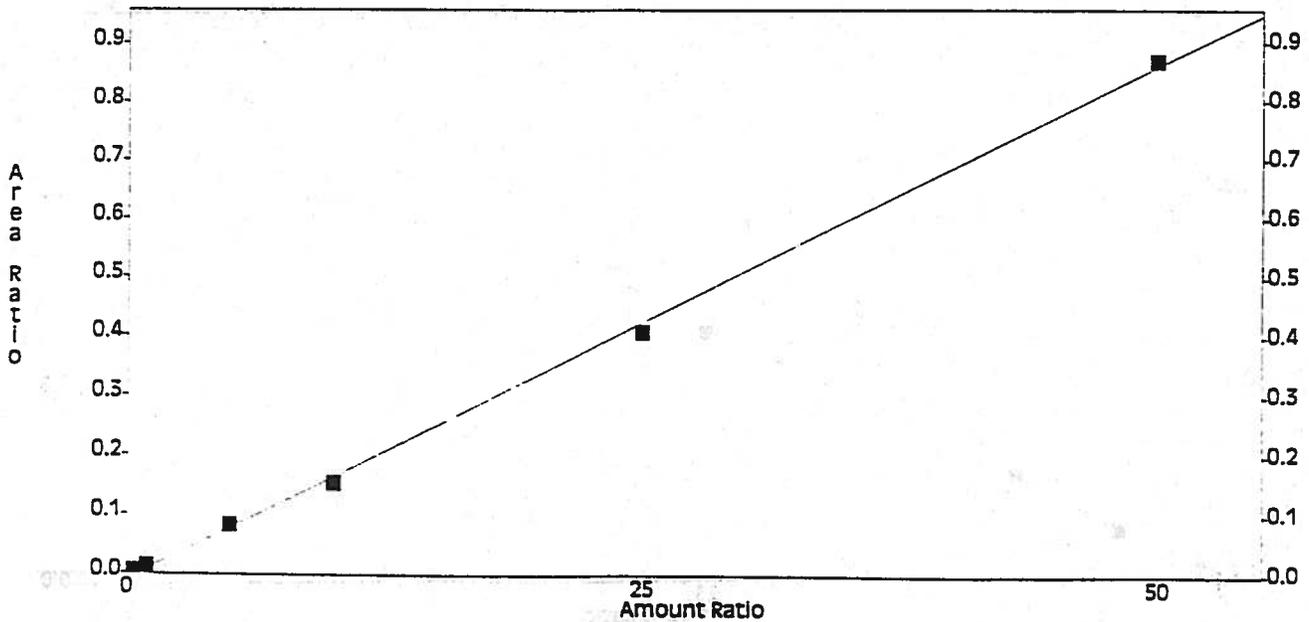
Calib Flag: Replace

Average RF: 0.0154154
 RF StdDev: 0.00175858
 RF %RSD: 11.408

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 57.5167 x Area + 0.525487
 R² = 0.998942 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:02

Channel : A

Peak : hexachlorobutadiene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0110	0.4	0.0276	0.0110							0
2	0.0014	0.5	0.002714	0.0014*							0
3	0.0125	1	0.01247	0.0125							0
4	0.0675	5	0.01351	0.0675							0
5	0.1077	10	0.01077	0.1077							0
6	0.3226	25	0.0129	0.3226							0
7	0.6236	50	0.01247	0.6236							0

Calib Flag: Replace

Average RF: 0.014953

RF StdDev: 0.00626013

RF %RSD: 41.8654

RF Definition: Area / Amount

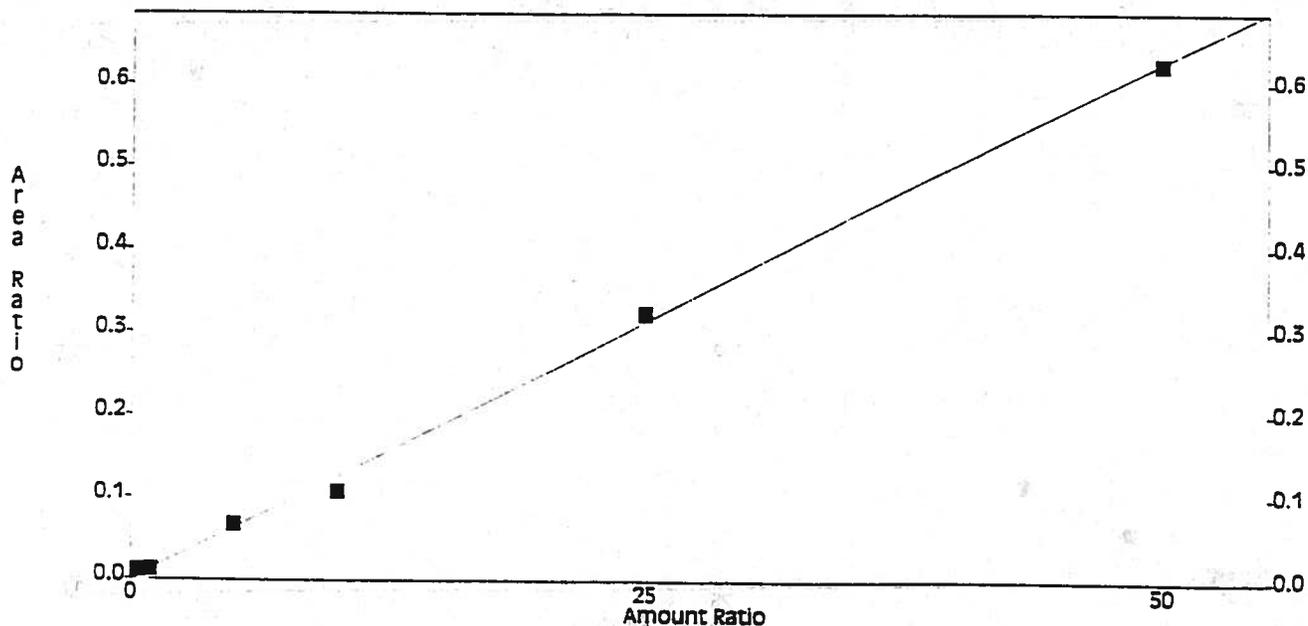
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 79.8685 x Area - 0.00801465

R² = 0.998404 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:03

Channel : A

Peak : Napthalene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0097	0.4	0.02435	0.0097							0
2	0.0044	0.5	0.00876	0.0044*							0
3	0.0181	1	0.0181	0.0181							0
4	0.1038	5	0.02076	0.1038							0
5	0.2063	10	0.02063	0.2063							0
6	0.5060	25	0.02024	0.5060							0
7	1.0981	50	0.02196	1.0981							0

Calib Flag: Replace

Average RF: 0.0210068

RF StdDev: 0.00206605

RF %RSD: 9.83513

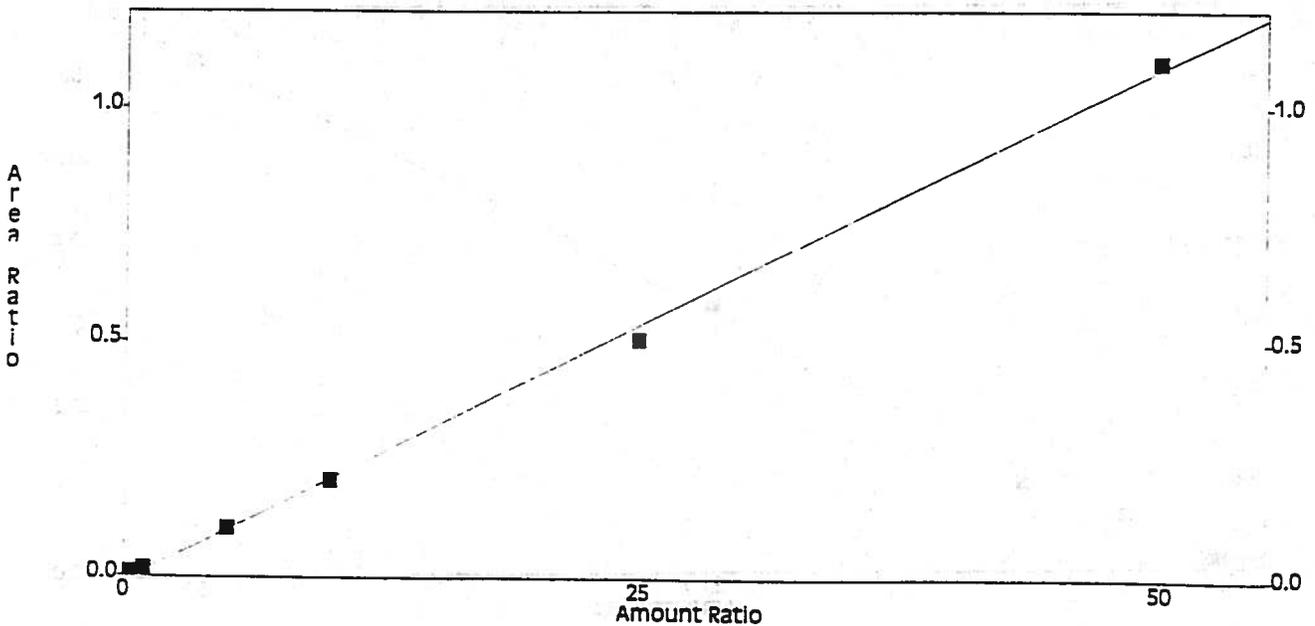
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 45.7421 x Area + 0.427873
R² = 0.998488 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:03

Channel : A

Peak : 1,2,3-tcb

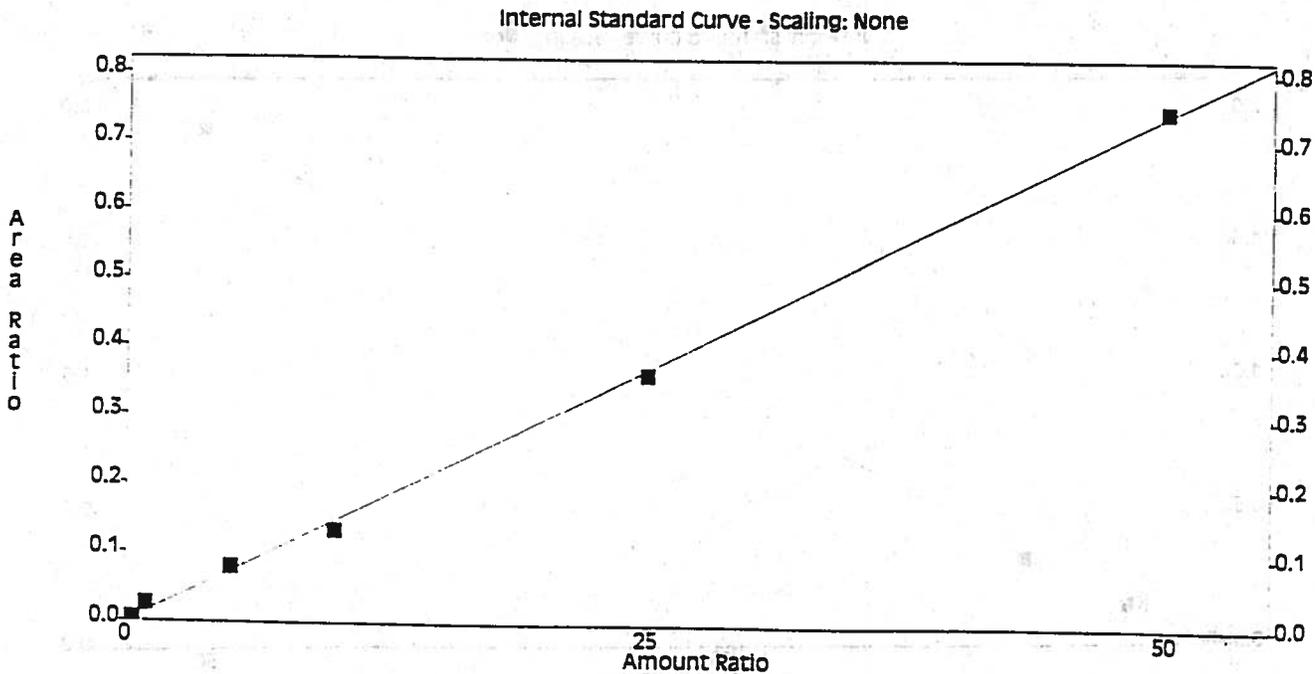
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0050	0.4	0.01251	0.0050							0
2	0.0013	0.5	0.002614	0.0013*							0
3	0.0259	1	0.02588	0.0259							0
4	0.0801	5	0.01602	0.0801							0
5	0.1335	10	0.01335	0.1335							0
6	0.3627	25	0.01451	0.3627							0
7	0.7473	50	0.01495	0.7473							0

Calib Flag: Replace

Average RF: 0.0162029
RF StdDev: 0.00489586
RF %RSD: 30.216

RF Definition: Area / Amount
Weighting Method: None
Int Through Zero: No

Linear Fit: Amount = 67.3612 x Area + 0.0263407
R² = 0.998838 ✓



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:21

Channel : B

Peak : DCDFM

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0021	0.4	0.005244	0.0021							0
2	0.0065	0.5	0.01293	0.0065							0
3	0.0207	1	0.02069	0.0207							0
4	0.1498	5	0.02996	0.1498							0
5	0.3224	10	0.03224	0.3224							0
6	0.7749	25	0.031	0.7749*							0
7	1.9279	50	0.03856	1.9279							0

Calib Flag: Replace

Average RF: 0.0232713

RF StdDev: 0.0126279

RF %RSD: 54.2638

RF Definition: Area / Amount

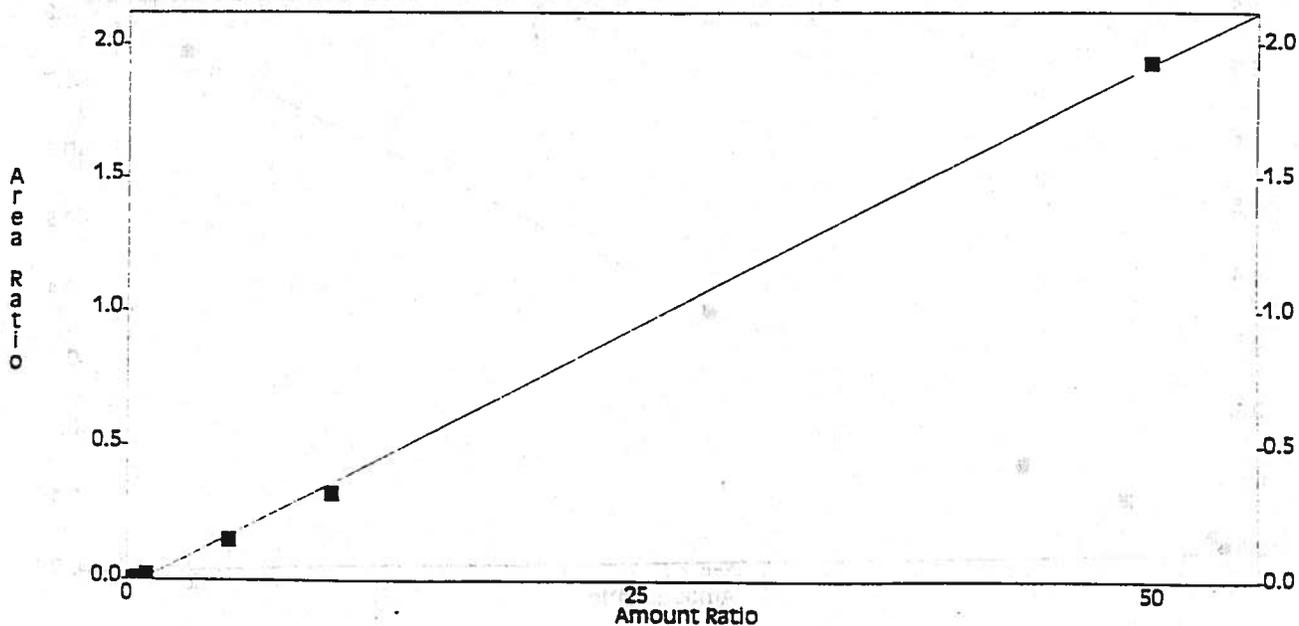
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 25.6317 x Area + 0.772058

R² = 0.999161

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used
 Printed : Jun 04, 1996 16:29:21
 Channel : B
 Peak : CHLOROMETHANE

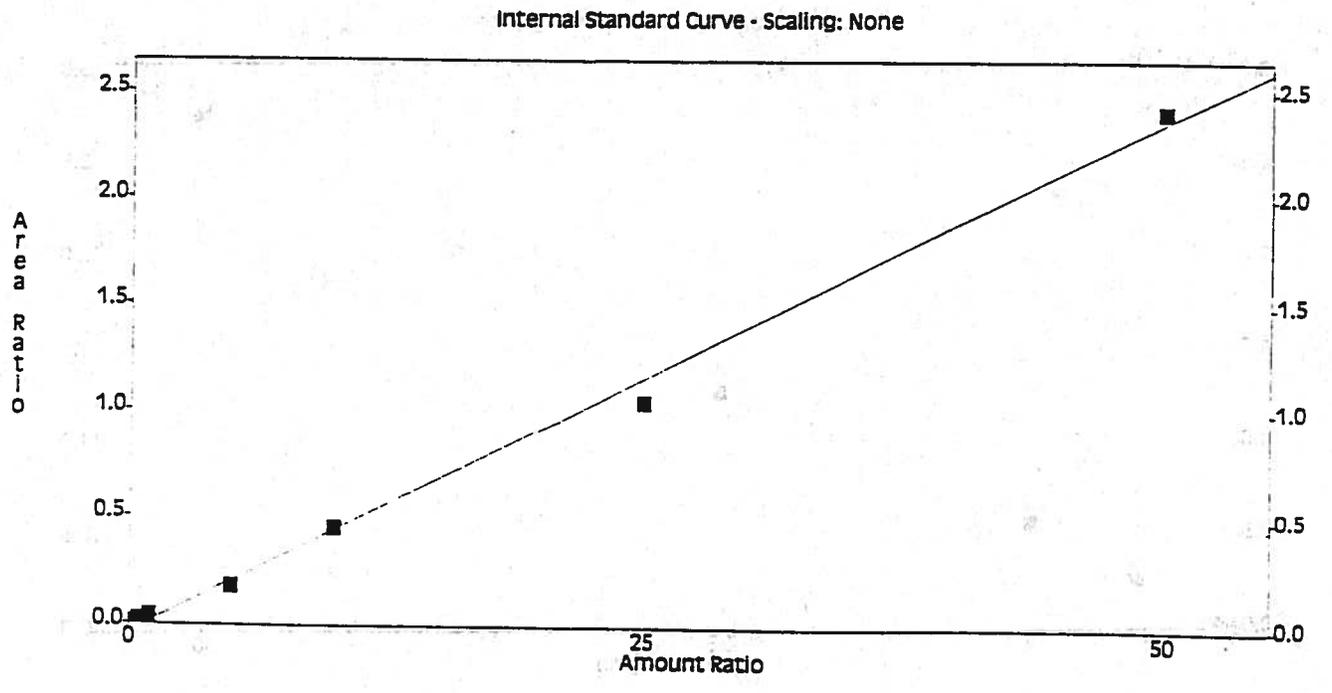
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0067	0.4	0.01685	0.0067							0
2	0.0216	0.5	0.04322	0.0216							0
3	0.0396	1	0.03963	0.0396							0
4	0.1775	5	0.0355	0.1775							0
5	0.4512	10	0.04512	0.4512							0
6	1.0485	25	0.04194	1.0485							0
7	2.4069	50	0.04814	2.4069							0

Calib Flag: Replace

Average RF: 0.0386301
 RF StdDev: 0.0104053
 RF %RSD: 26.9356

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 20.8917 x Area + 0.736346
 R² = 0.996109 ✓



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used

Printed : Jun 04, 1996 16:29:22

Channel : B

Peak : VINYL CHLORIDE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0109	0.4	0.02719	0.0109							0
2	0.0276	0.5	0.05527	0.0276							0
3	0.0460	1	0.04602	0.0460							0
4	0.2608	5	0.05217	0.2608							0
5	0.5766	10	0.05766	0.5766							0
6	1.2821	25	0.05129	1.2821							0
7	2.7762	50	0.05552	2.7762							0

Calib Flag: Replace

Average RF: 0.0493025

RF StdDev: 0.0104554

RF %RSD: 21.2067

RF Definition: Area / Amount

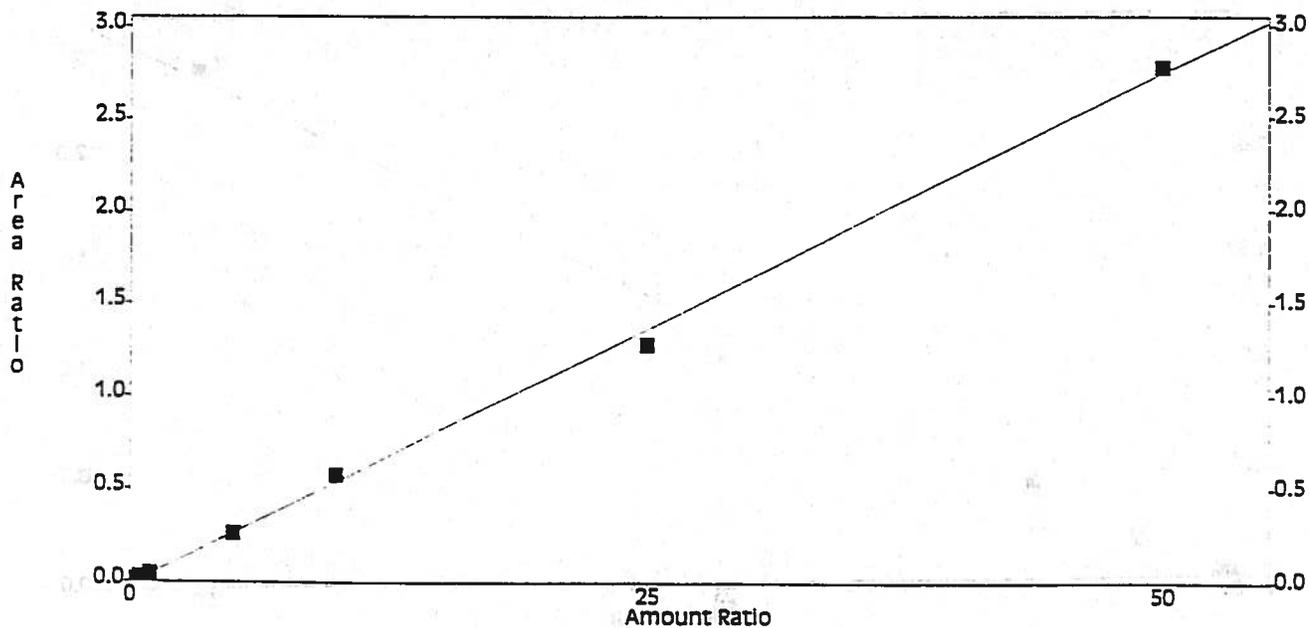
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 18.1302 * x Area + 0.229425

R² = 0.99845 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:22

Channel : B

Peak : BROMOMETHANE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
2	0.0004	0.5	0.0007538	0.0004							0
4	0.0335	5	0.006709	0.0335							0
5	0.1109	10	0.01109	0.1109							0
6	0.3678	25	0.01471	0.3678							0
7	0.8431	50	0.01686	0.8431							0

Calib Flag: Replace

Average RF: 0.0100252

RF StDev: 0.00015712

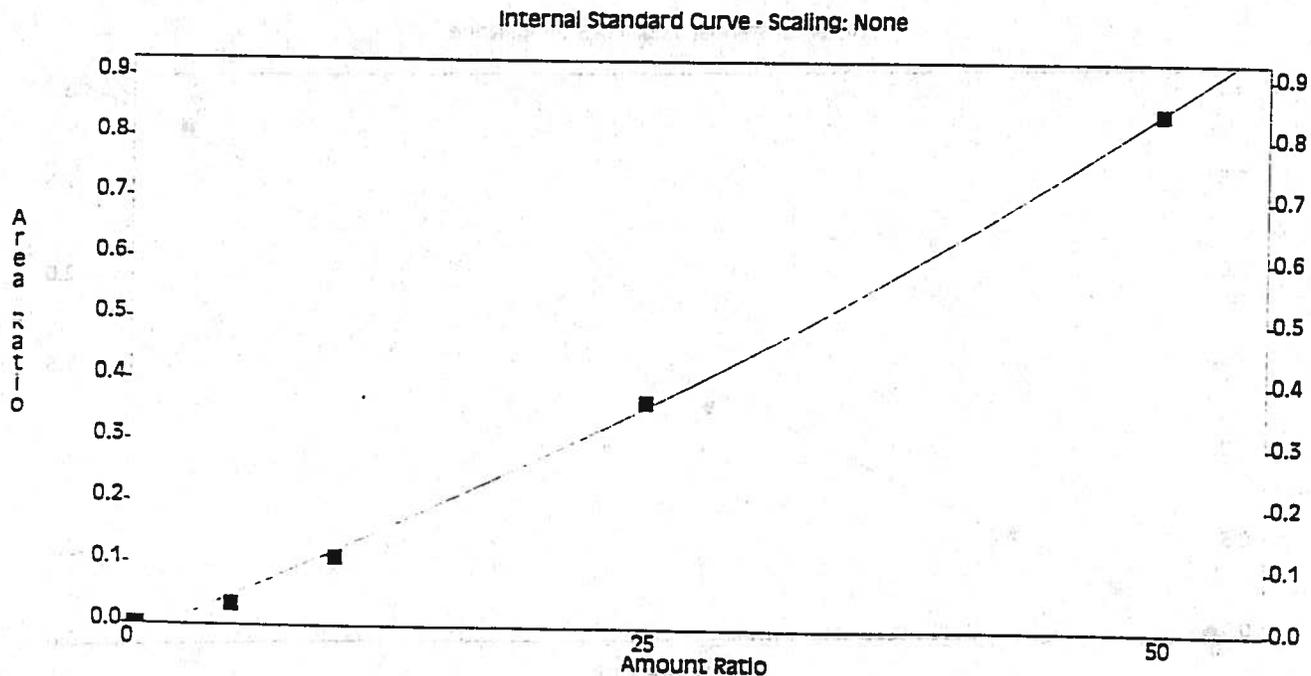
RF %RSD: 64.412

RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Quadratic Fit: Amount = $-15.5194/x \text{ Area}^2 + 70.2689 \times \text{Area} + 1.71503$
R² = 0.998064



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:22

Channel : B

Peak : CHLOROETHANE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
2	0.0146	0.5	0.02928	0.0146							0
3	0.0265	1	0.02647	0.0265							0
4	0.2699	5	0.05397	0.2699							0
5	0.5718	10	0.05718	0.5718							0
6	1.2656	25	0.05062	1.2656							0
7	2.8278	50	0.05656	2.8278							0

Calib Flag: Replace

Average RF: 0.045679

RF StdDev: 0.014015

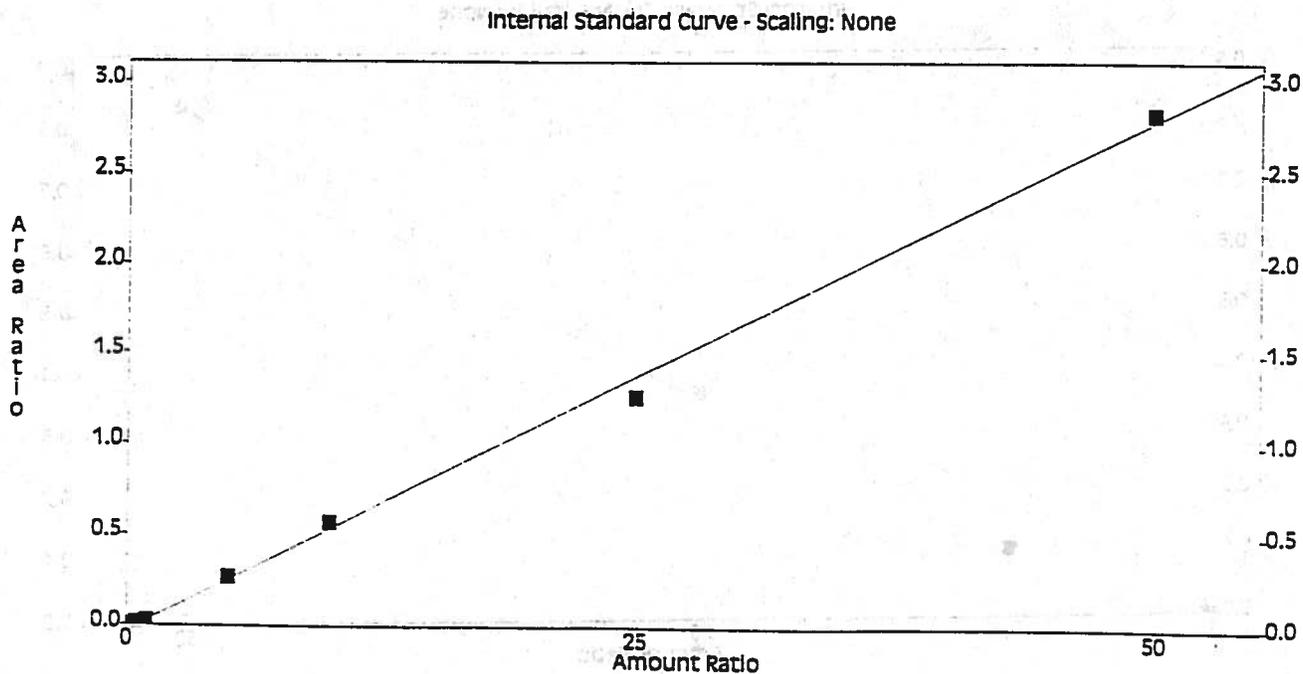
RF %RSD: 30.6815

RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 17.753 x Area + 0.52626
R² = 0.997199



Method : c:\ezchrom\methods\lvoa0603.met
 Printed : Jun 04, 1996 16:29:23
 Channel : B
 Peak : TCFM

* - Replicate Not Used

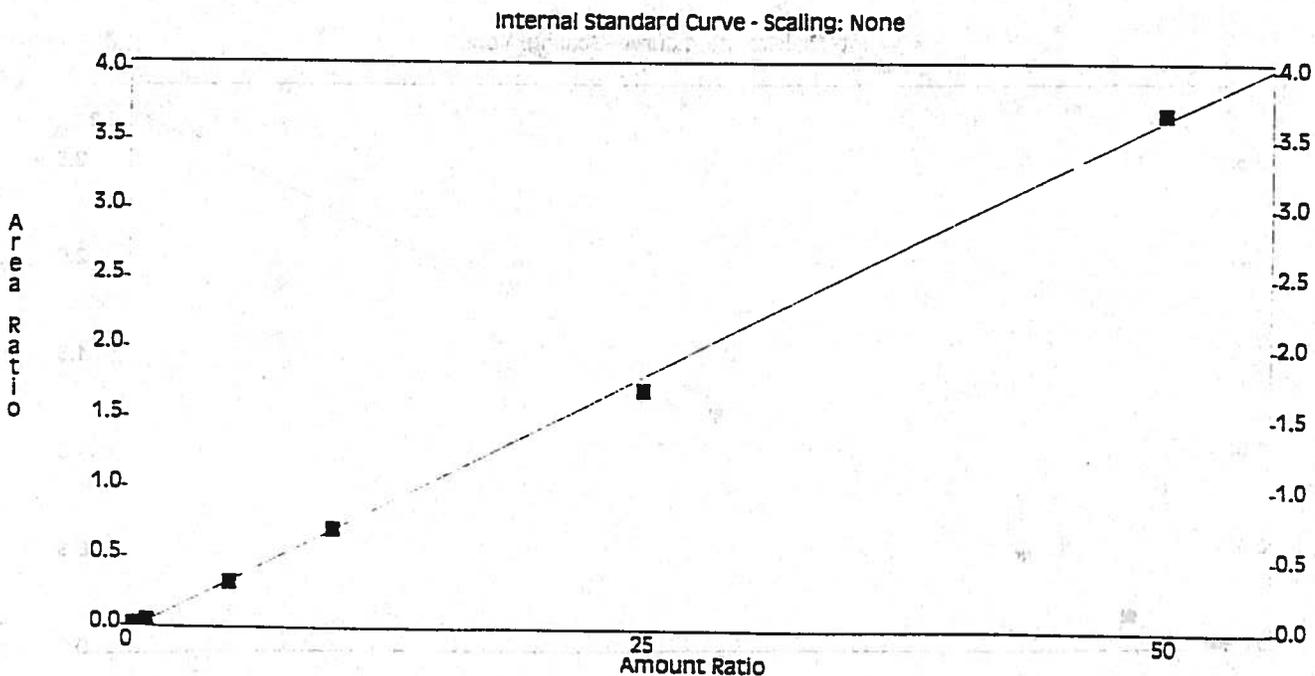
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0095	0.4	0.0238	0.0095							0
2	0.0213	0.5	0.04267	0.0213							0
3	0.0470	1	0.04703	0.0470							0
4	0.3242	5	0.06485	0.3242							0
5	0.7077	10	0.07077	0.7077							0
6	1.7068	25	0.06827	1.7068							0
7	3.6932	50	0.07386	3.6932							0

Calib Flag: Replace

Average RF: 0.0558918
 F StdDev: 0.0185345
 RF %RSD: 33.1613

RF Definition: Area / Amount
 ighting Method: None
 it Through Zero: No

Linear Fit: Amount = 13.5606 x Area + 0.517692
 $R^2 = 0.998853$



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:23

Channel : B

Peak : FREON 113

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0050	0.4	0.01253	0.0050							0
2	0.0127	0.5	0.02541	0.0127							0
3	0.0253	1	0.02526	0.0253							0
4	0.1746	5	0.03493	0.1746							0
5	0.4796	10	0.04796	0.4796							0
6	1.2064	25	0.04826	1.2064							0
7	2.6520	50	0.05304	2.6520							0

Calib Flag: Replace

Average RF: 0.0353395

RF StdDev: 0.015057

RF %RSD: 42.6068

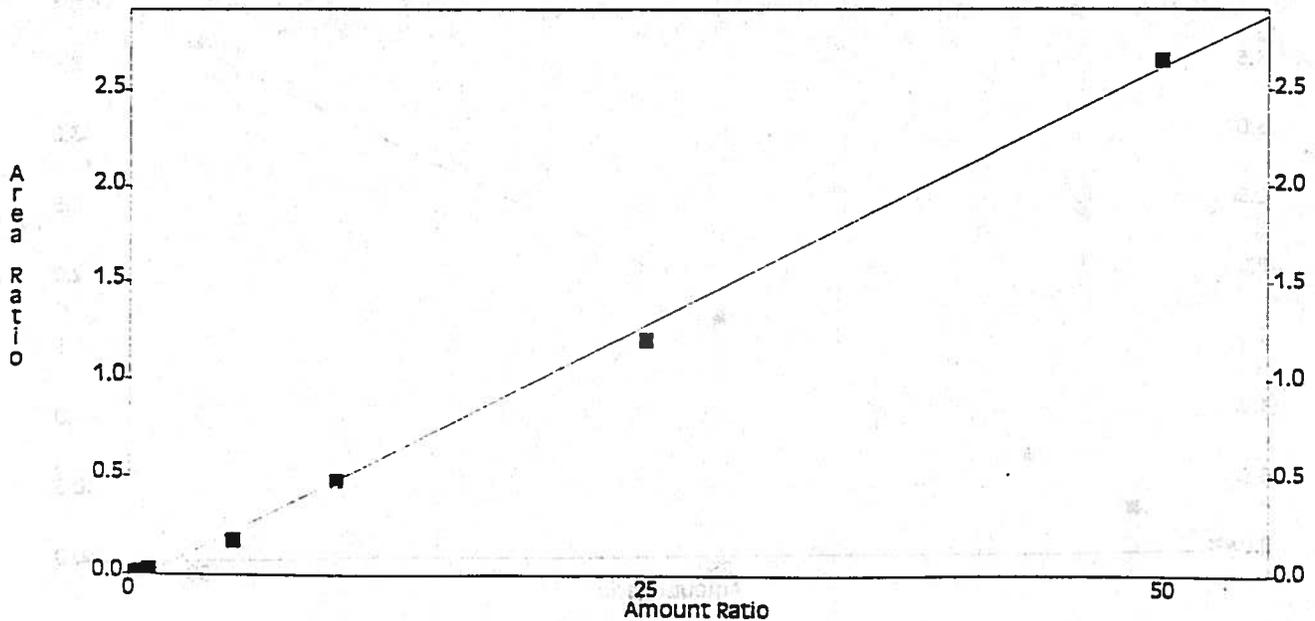
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: amount = 18.7819 * Area + 0.905279
R² = 0.997965

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:24

Channel : B

Peak : 1,1-DCE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0005	0.4	0.001245	0.0005							0
2	0.0204	0.5	0.04085	0.0204							0
3	0.0455	1	0.04549	0.0455							0
4	0.2880	5	0.05759	0.2880							0
5	0.6155	10	0.06155	0.6155							0
6	1.8232	25	0.07293	1.8232							0
7	3.5254	50	0.07051	3.5254							0

Calib Flag: Replace

Average RF: 0.0500222

RF StdDev: 0.0245577

RF %RSD: 49.0936

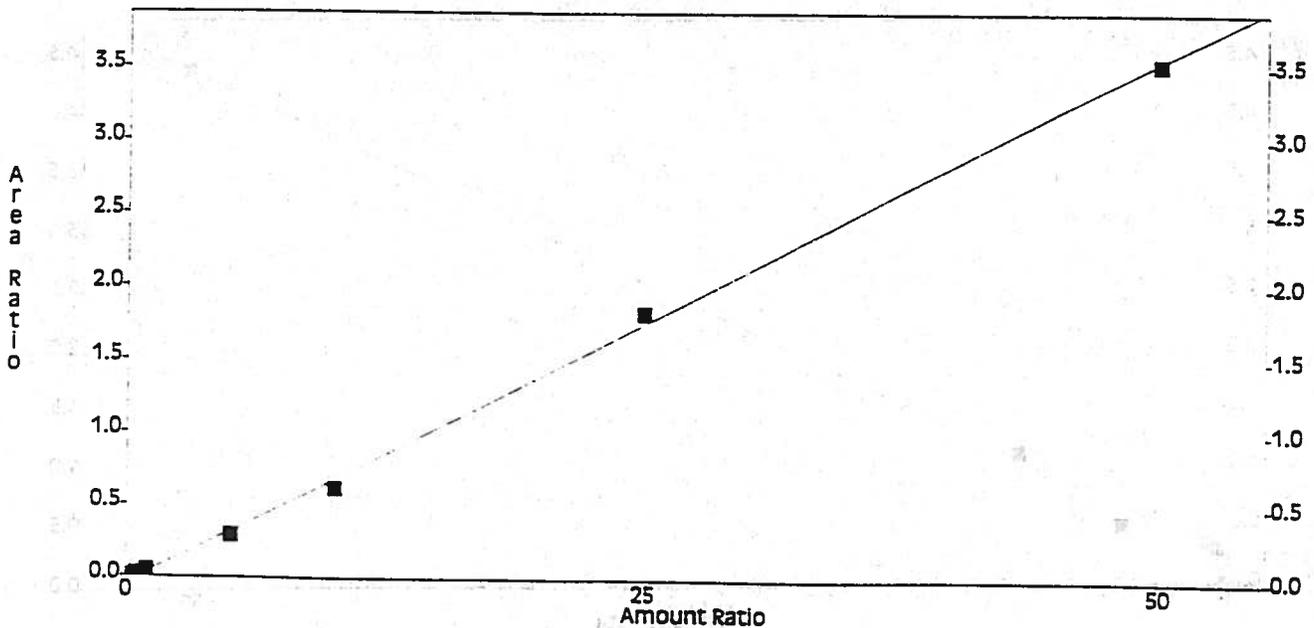
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 13.9391 x Area + 0.546604
 $R^2 = 0.998952$

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:24

Channel : B

Peak : METH CHLORIDE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.3027	0.4	0.7567	0.3027							0
2	0.3131	0.5	0.6262	0.3131							0
3	0.3312	1	0.3312	0.3312							0
4	0.4968	5	0.09936	0.4968							0
5	1.1139	10	0.1114	1.1139							0
6	2.0536	25	0.08215	2.0536*							0
7	4.3857	50	0.08771	4.3857							0

Calib Flag: Replace

Average RF: 0.33543

RF StdDev: 0.293027

RF %RSD: 87.3588

RF Definition: Area / Amount

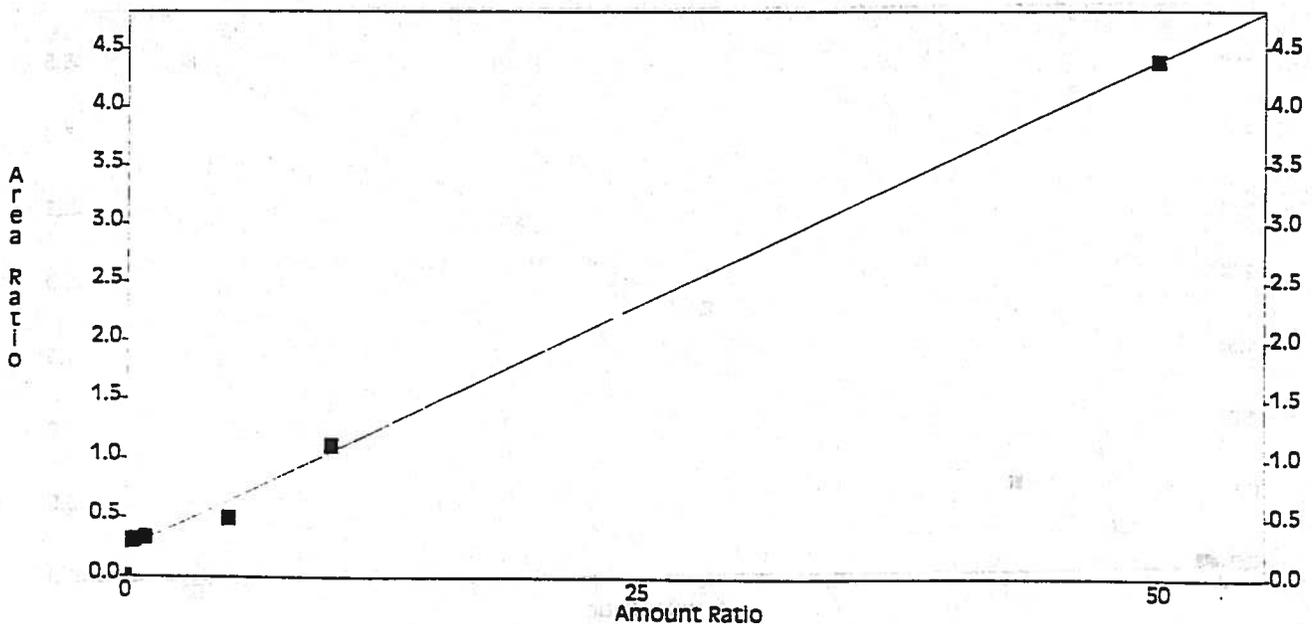
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 12.0203 * Area - 2.76027

R² = 0.997806 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used
 Printed : Jun 04, 1996 16:29:24
 Channel : B
 Peak : TRANS 1,2-DCE

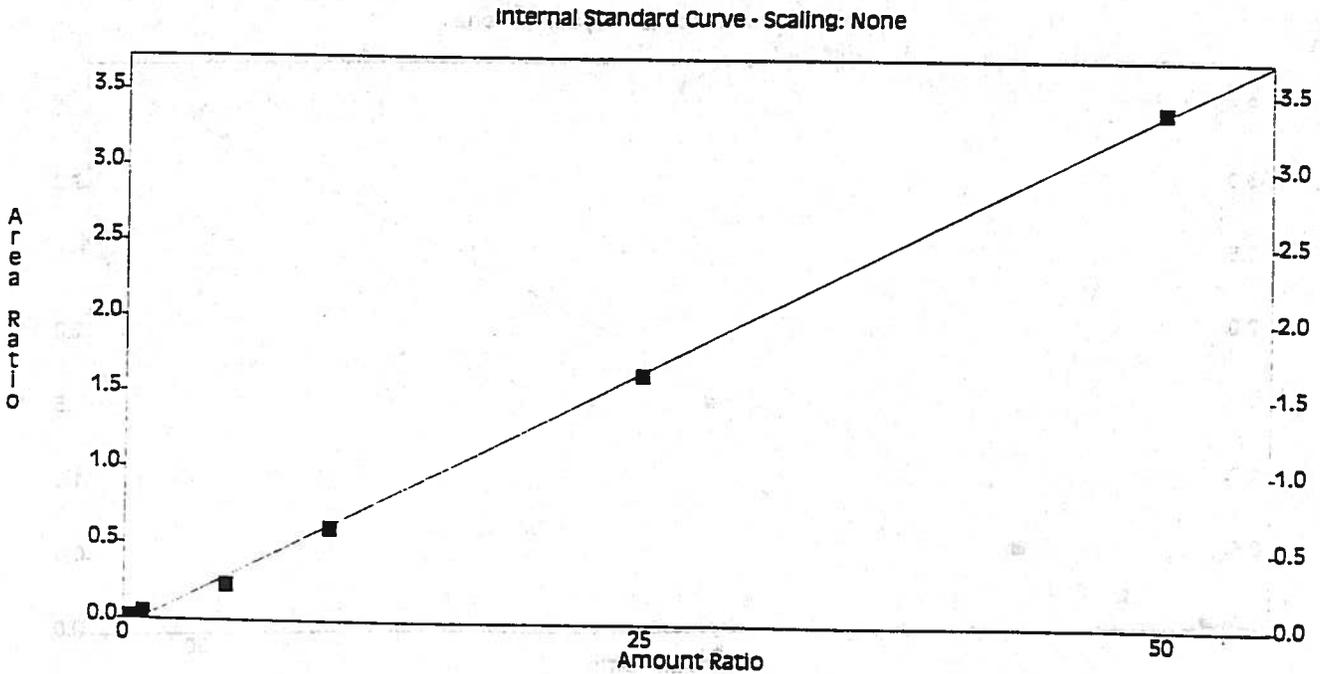
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0161	0.4	0.04015	0.0161							0
2	0.0134	0.5	0.02681	0.0134*							0
3	0.0485	1	0.04852	0.0485							0
4	0.2305	5	0.04609	0.2305							0
5	0.6075	10	0.06075	0.6075							0
6	1.6365	25	0.06546	1.6365							0
7	3.3835	50	0.06767	3.3835							0

Calib Flag: Replace

Average RF: 0.0547738
 RF StdDev: 0.0113544
 RF %RSD: 20.7297

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 14.6066 x Area + 0.815261
 R² = 0.99914 ✓



Printed : Jun 04, 1996 16:29:25

Channel : B

Peak : 1,1-DCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0045	0.4	0.01125	0.0045							0
2	0.0094	0.5	0.01889	0.0094							0
3	0.0335	1	0.0335	0.0335							0
4	0.2287	5	0.04574	0.2287							0
5	0.5592	10	0.05592	0.5592							0
6	1.5459	25	0.06184	1.5459							0
7	3.4893	50	0.06979	3.4893							0

Calib Flag: Replace

Average RF: 0.0424026

RF StdDev: 0.0220655

RF %RSD: 52.0381

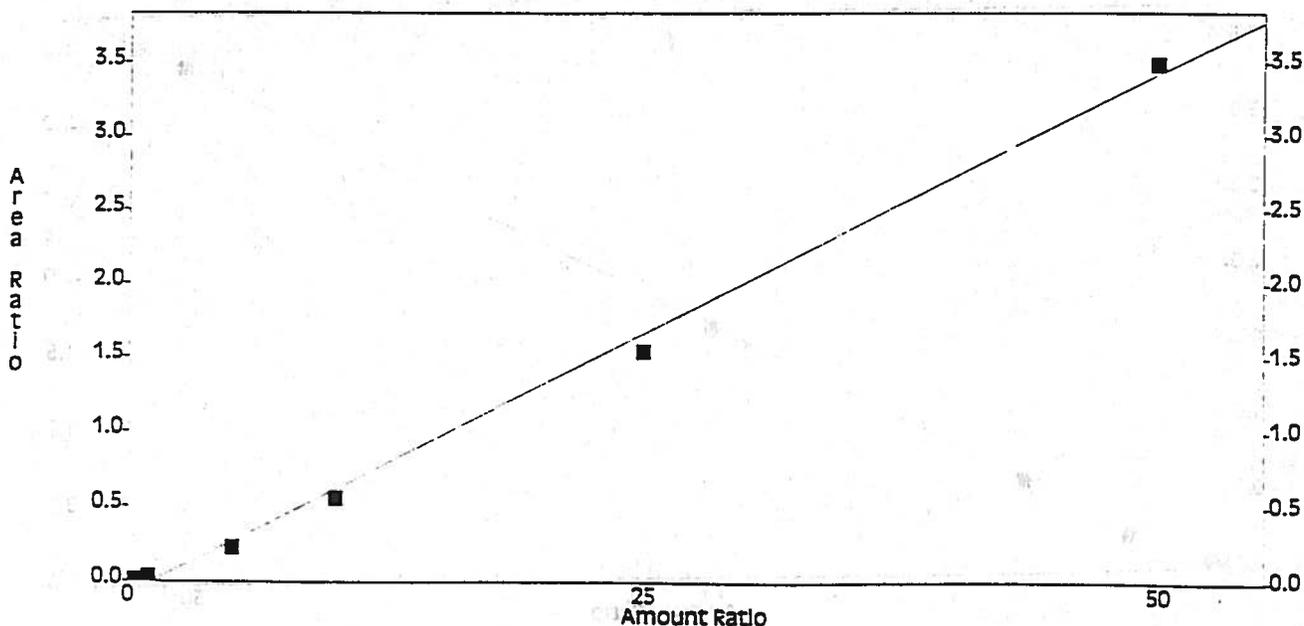
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 14.2698 x Area + 1.16331
 R² = 0.99663 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:25

Channel : B

Peak : 2,2-DCPA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0025	0.4	0.006361	0.0025							0
2	0.0056	0.5	0.01118	0.0056							0
3	0.0177	1	0.01765	0.0177							0
4	0.1309	5	0.02618	0.1309							0
5	0.2930	10	0.0293	0.2930							0
6	0.8625	25	0.0345	0.8625							0
7	2.1698	50	0.0434	2.1698							0

Calib Flag: Replace

Average RF: 0.0240816

RF StdDev: 0.0131332

RF %RSD: 54.5364

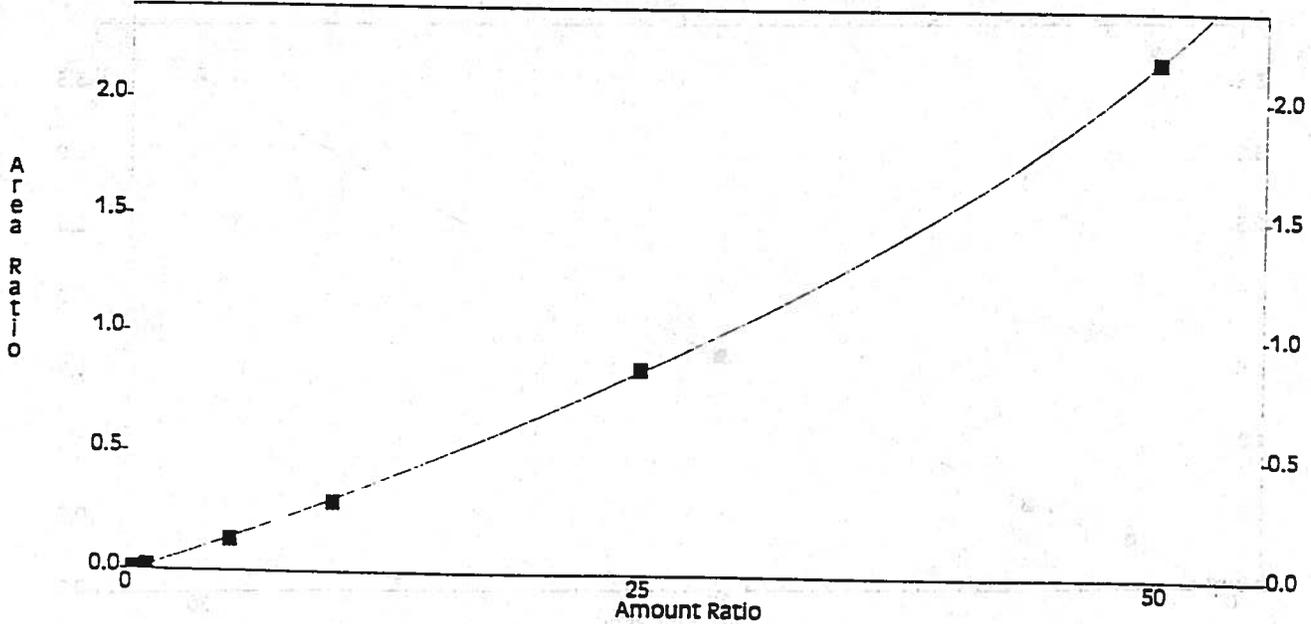
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Quadratic Fit: Amount = $-4.49642 \times \text{Area}^2 + 32.5542 \times \text{Area} + 0.503834$
R² = 0.99983 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met
 Printed : Jun 04, 1996 16:29:26
 Channel : B
 Peak : CIS 1,2-DCE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0147	0.4	0.03686	0.0147							0
2	0.0257	0.5	0.05146	0.0257							0
3	0.0396	1	0.03961	0.0396							0
4	0.3403	5	0.06805	0.3403							0
5	0.5946	10	0.05946	0.5946							0
6	1.6269	25	0.06508	1.6269							0
7	3.5697	50	0.07139	3.5697							0

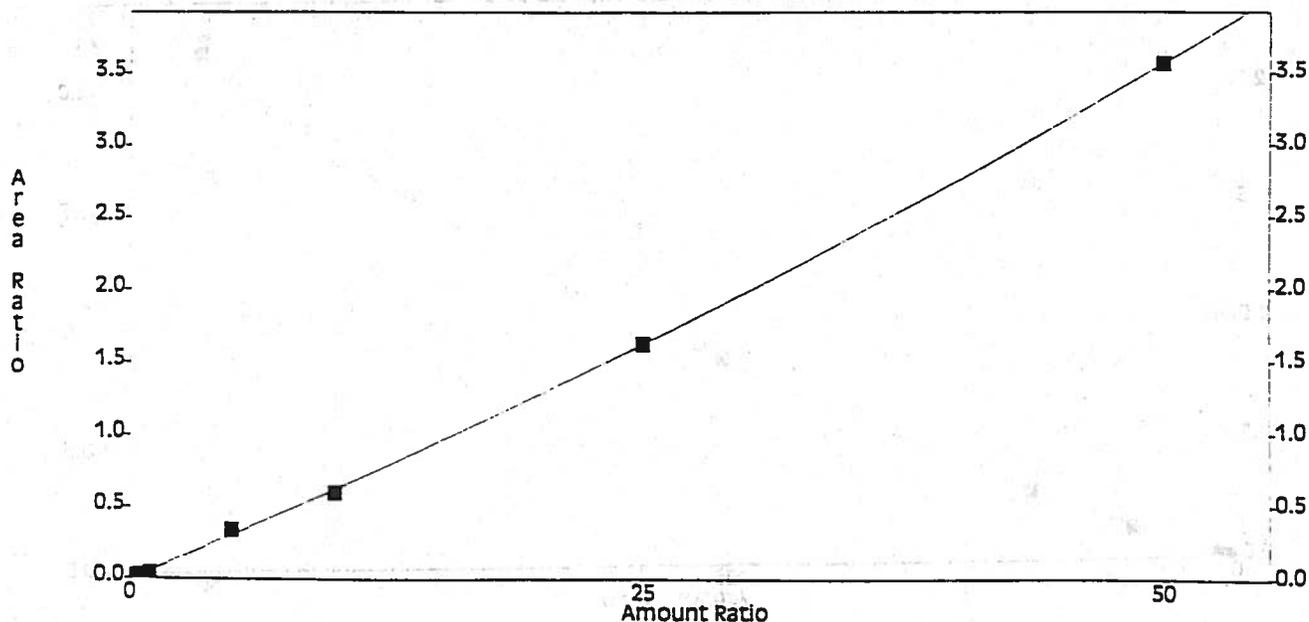
Calib Flag: Replace

Average RF: 0.0559862
 RF StdDev: 0.0137376
 RF %RSD: 24.5375

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = -0.681392 x Area² + 16.409 x Area + 0.111852
 R² = 0.999717

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:26

Channel : B

Peak : CHLOROFORM

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0204	0.4	0.05108	0.0204							0
2	0.0361	0.5	0.07215	0.0361							0
3	0.0615	1	0.06152	0.0615							0
4	0.3592	5	0.07184	0.3592							0
5	0.7251	10	0.07251	0.7251							0
6	1.8702	25	0.07481	1.8702							0
7	3.8778	50	0.07756	3.8778							0

Calib Flag: Replace

Average RF: 0.0687801

RF StdDev: 0.00925536

RF %RSD: 13.4565

RF Definition: Area / Amount

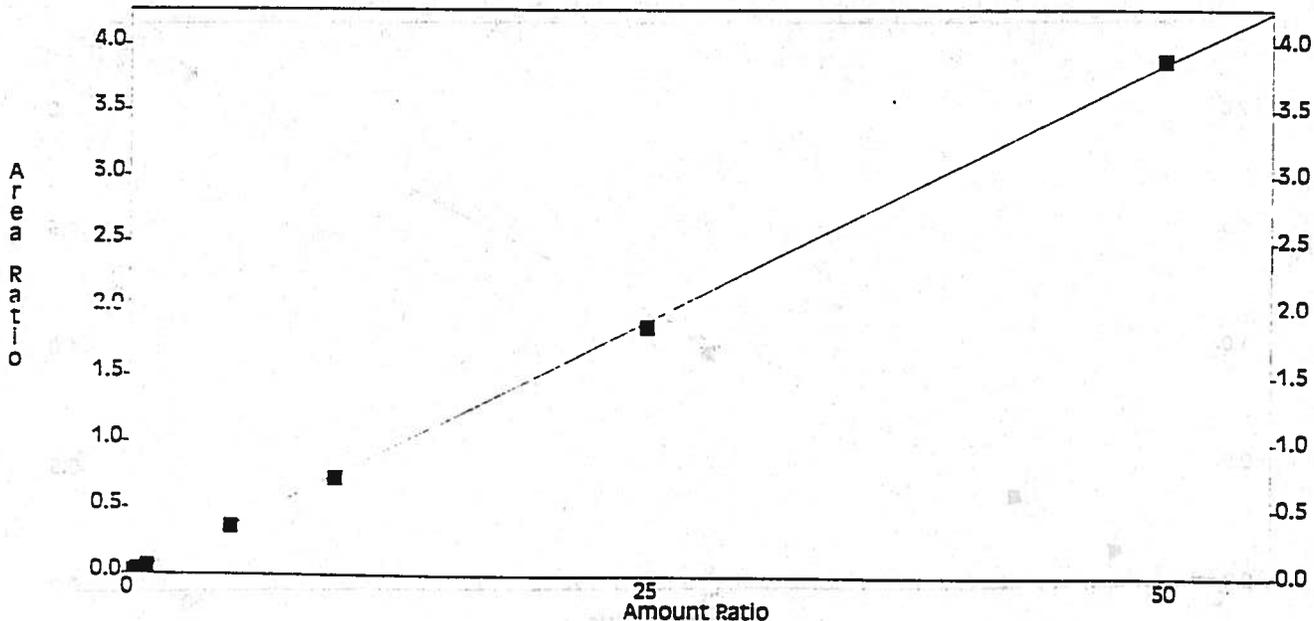
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 12.8949 x Area + 0.325305

R² = 0.999676

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met
 Printed : Jun 04, 1996 16:29:27
 Channel : B
 Peak : BCM

* - Replicate Not Used

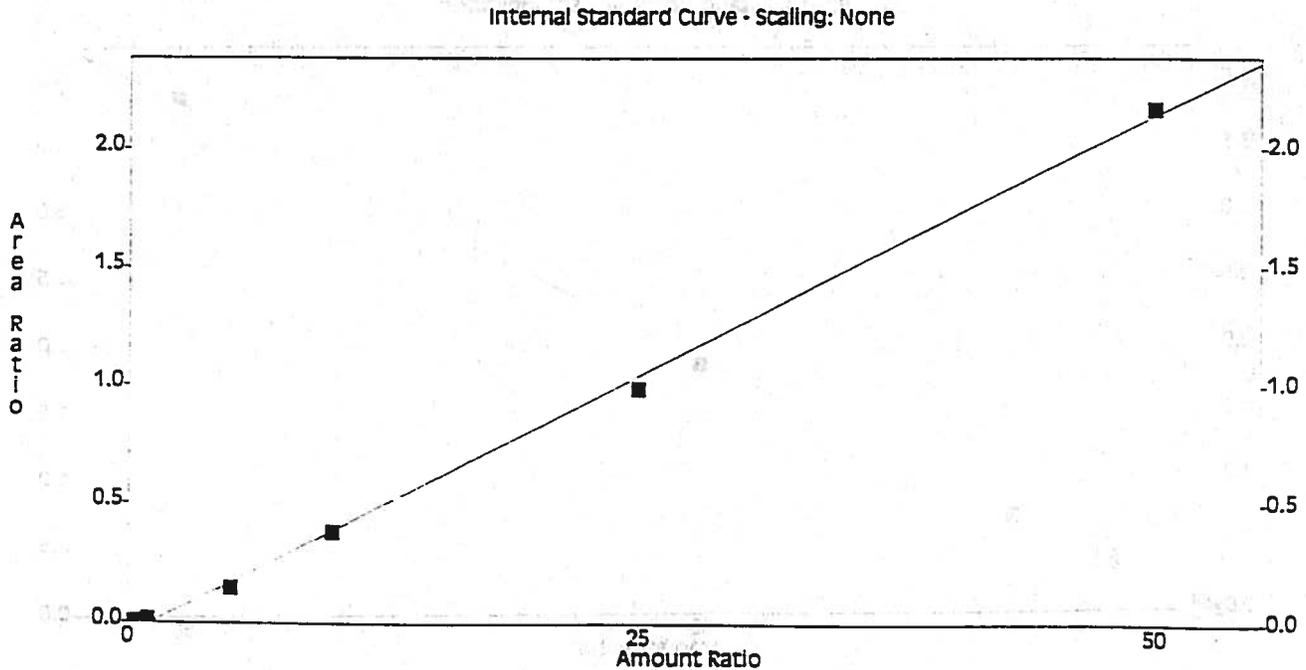
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0045	0.4	0.01124	0.0045*							0
2	0.0045	0.5	0.009063	0.0045							0
3	0.0155	1	0.01546	0.0155							0
4	0.1472	5	0.02944	0.1472							0
5	0.3824	10	0.03824	0.3824							0
6	0.9901	25	0.0396	0.9901							0
7	2.1708	50	0.04342	2.1708							0

Calib Flag: Replace

Average RF: 0.0292033
 RF StdDev: 0.0140456
 RF %RSD: 48.0959

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 22.7927 x Area + 1.15456
 $R^2 = 0.998316$



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used
 Printed : Jun 04, 1996 16:29:27
 Channel : B
 Peak : 1,1,1-TCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0174	0.4	0.04362	0.0174							0
2	0.0212	0.5	0.04236	0.0212							0
3	0.0529	1	0.05285	0.0529							0
4	0.3287	5	0.06574	0.3287							0
5	0.6994	10	0.06994	0.6994							0
6	1.6471	25	0.06588	1.6471							0
7	3.7829	50	0.07566	3.7829							0

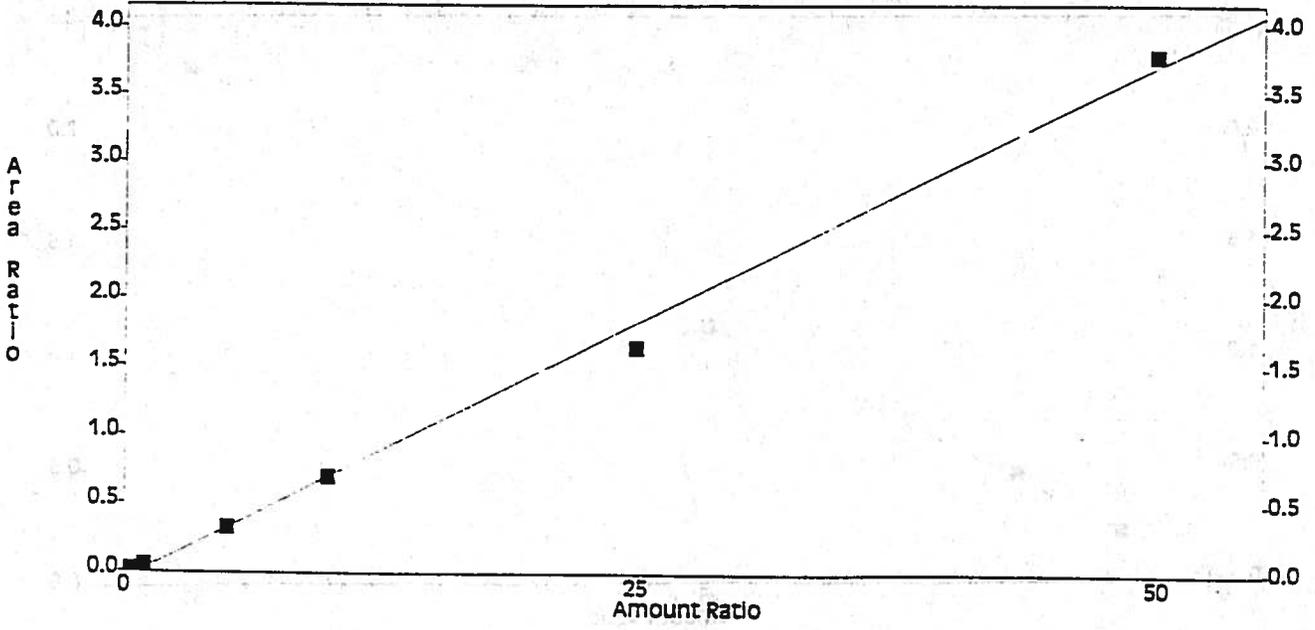
Calib Flag: Replace

Average RF: 0.0594361
 RF StdDev: 0.0131623
 RF %RSD: 22.1453

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 13.3128 x Area + 0.67251
 R² = 0.996363 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:27

Channel : B

Peak : 1,1-DCPE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0100	0.4	0.02493	0.0100							0
2	0.0149	0.5	0.02987	0.0149							0
3	0.0379	1	0.0379	0.0379							0
4	0.2230	5	0.04461	0.2230							0
5	0.4830	10	0.0483	0.4830							0
6	1.1365	25	0.04546	1.1365							0
7	2.2934	50	0.04587	2.2934							0

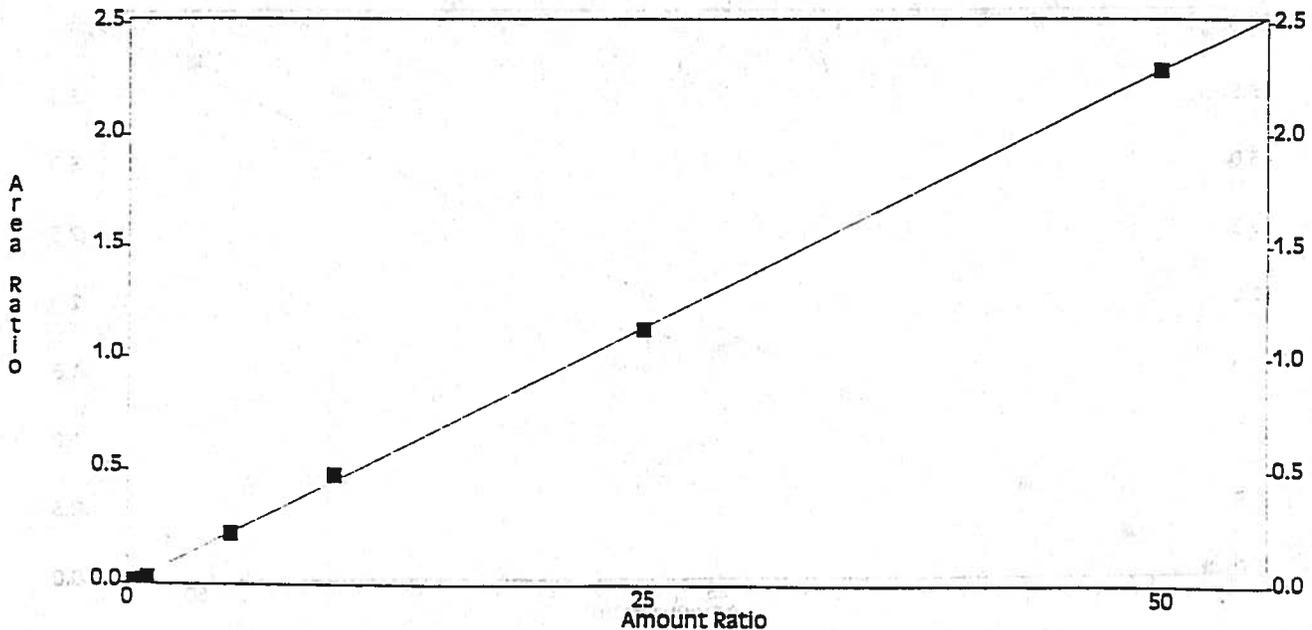
Calib Flag: Replace

Average RF: 0.0395626
RF StdDev: 0.00901008
RF %RSD: 22.7742

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 21.7604 x Area + 0.0760446
R² = 0.999796 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:28

Channel : B

Peak : CARBON TET

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0169	0.4	0.04222	0.0169							0
2	0.0232	0.5	0.04637	0.0232							0
3	0.0692	1	0.06918	0.0692							0
4	0.3914	5	0.07829	0.3914							0
5	0.8296	10	0.08296	0.8296							0
6	1.8751	25	0.07501	1.8751							0
7	4.1488	50	0.08298	4.1488							0

Calib Flag: Replace

Average RF: 0.0681432

RF StdDev: 0.0170135

RF %RSD: 24.9673

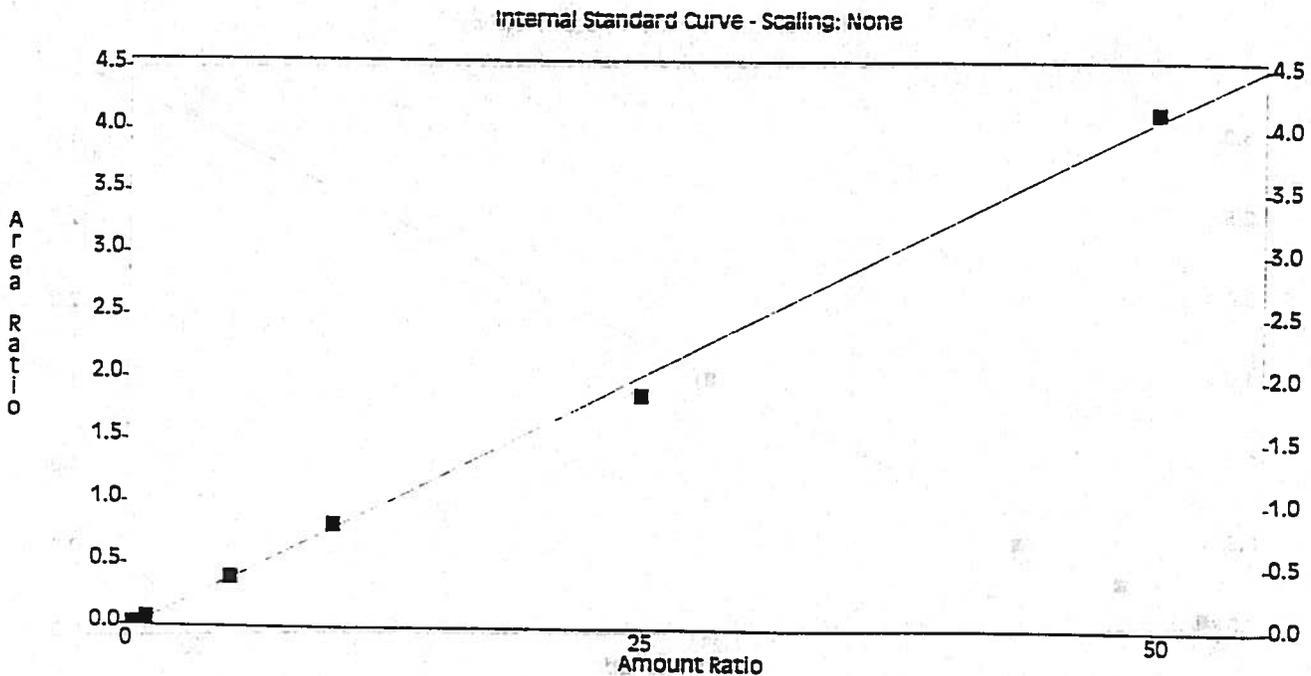
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 12.1382 x Area + 0.375948

R² = 0.997882 ✓



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used
 Printed : Jun 04, 1996 16:29:28
 Channel : B
 Peak : 1,2-DCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0146	0.4	0.03659	0.0146							0
2	0.0192	0.5	0.03847	0.0192							0
3	0.0468	1	0.04681	0.0468							0
4	0.2801	5	0.05601	0.2801							0
5	0.5291	10	0.05291	0.5291							0
6	1.5401	25	0.0616	1.5401							0
7	3.1492	50	0.06298	3.1492							0

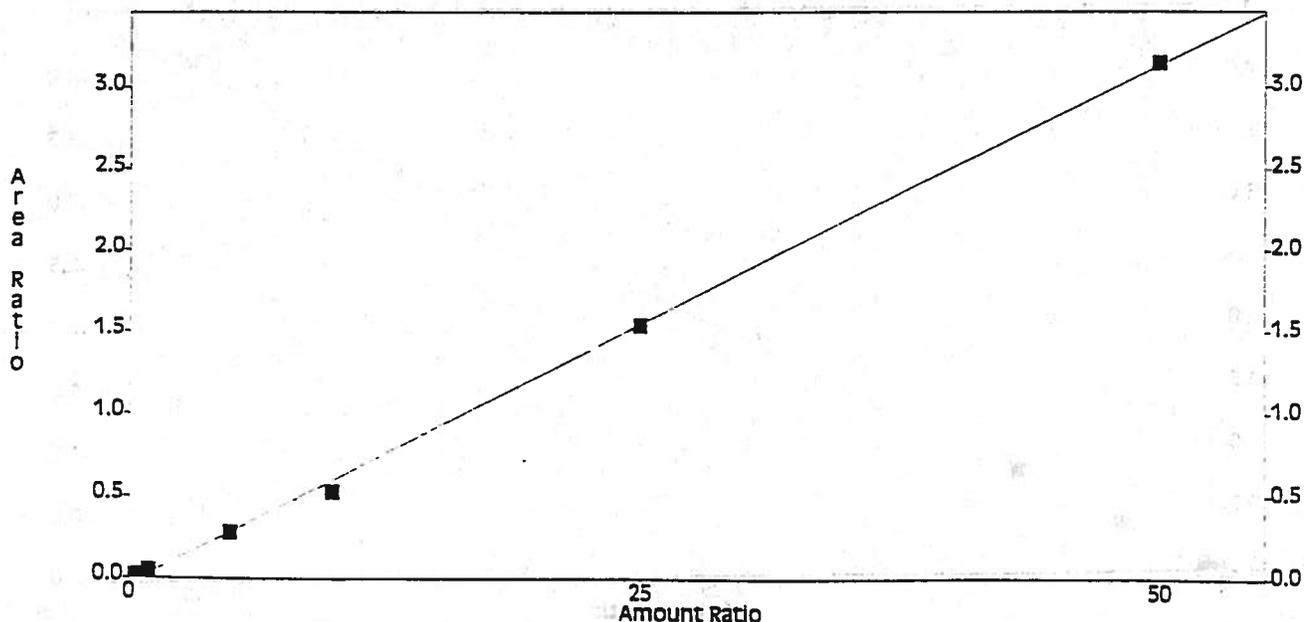
Calib Flag: Replace

Average RF: 0.0507676
 RF StdDev: 0.0105413
 RF %RSD: 20.7550

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 15.7816 x Area + 0.550466
 $R^2 = 0.999193$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:29

Channel : B

Peak : 2-CL ETH VI ETH

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
2	0.0007	0.5	0.001411	0.0007							0
3	0.0037	1	0.003655	0.0037							0
4	0.0415	5	0.008307	0.0415							0
5	0.1067	10	0.01067	0.1067							0
6	0.2019	25	0.008075	0.2019*							0
7	0.6257	50	0.01251	0.6257							0

Calib Flag: Replace

Average RF: 0.00731203

RF StdDev: 0.00467824

RF %RSD: 63.98

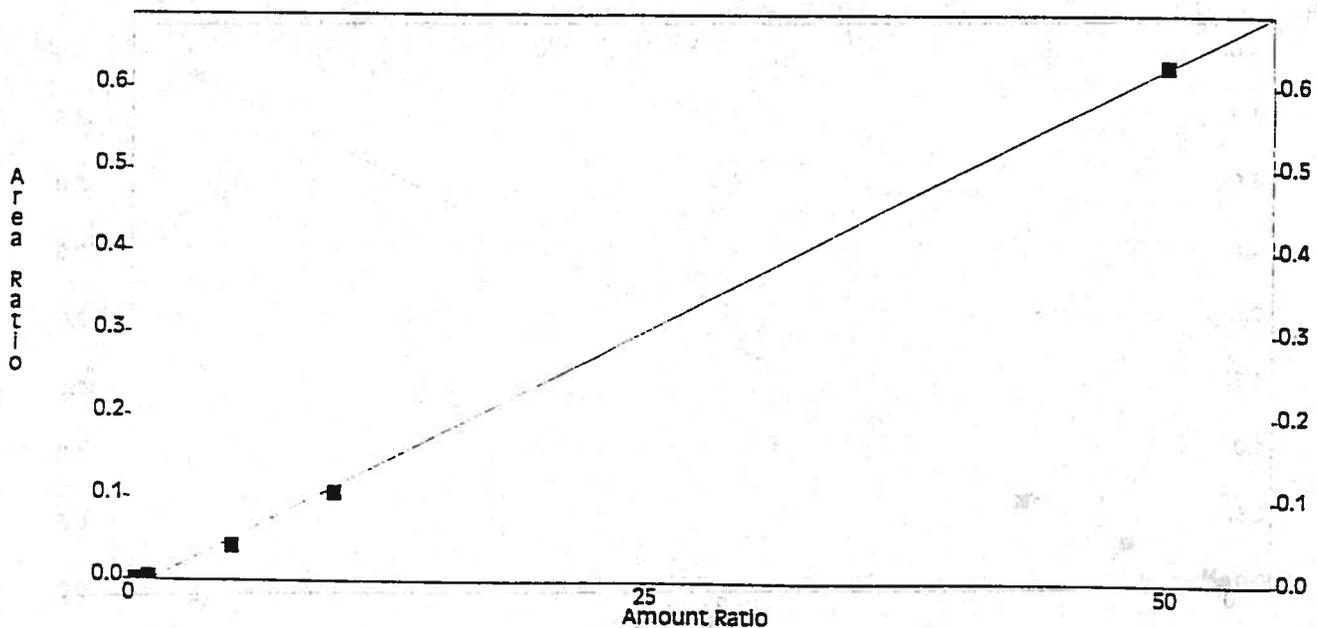
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 78.3587 x Area + 1.10236
R² = 0.999254

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:29

Channel : B

Peak : TCE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0182	0.4	0.04542	0.0182							0
2	0.0270	0.5	0.05403	0.0270							0
3	0.0899	1	0.08985	0.0899							0
4	0.3406	5	0.06813	0.3406							0
5	0.6605	10	0.06605	0.6605							0
6	1.6032	25	0.06413	1.6032*							0
7	3.8557	50	0.07711	3.8557							0

Calib Flag: Replace

Average RF: 0.0667651

RF StdDev: 0.0158768

RF %RSD: 23.78

RF Definition: Area / Amount

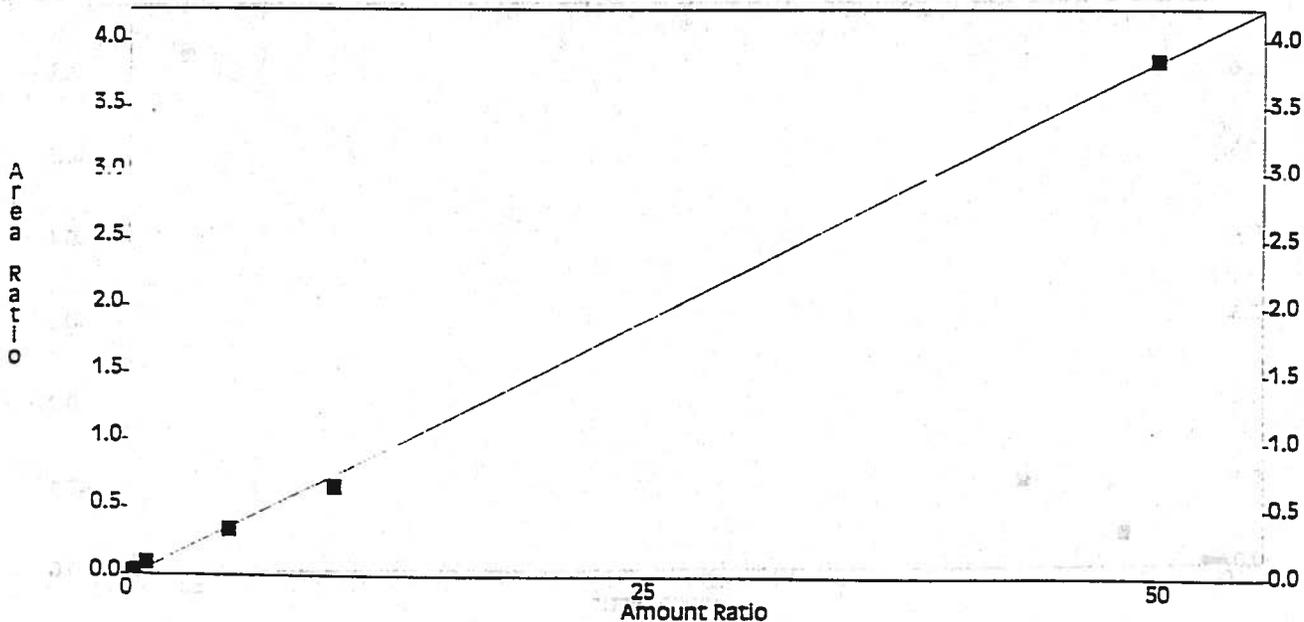
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 12.9088 x Area + 0.41009

R² = 0.999121 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:30

Channel : B

Peak : 1,2-DCPA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0144	0.4	0.0359	0.0144							0
2	0.0249	0.5	0.04976	0.0249							0
3	0.0604	1	0.06038	0.0604							0
4	0.2957	5	0.05915	0.2957							0
5	0.5578	10	0.05578	0.5578							0
6	1.5323	25	0.06129	1.5323							0
7	2.9121	50	0.05824	2.9121							0

Calib Flag: Replace

Average RF: 0.0543584

RF StdDev: 0.00900218

RF %RSD: 16.5608

RF Definition: Area / Amount

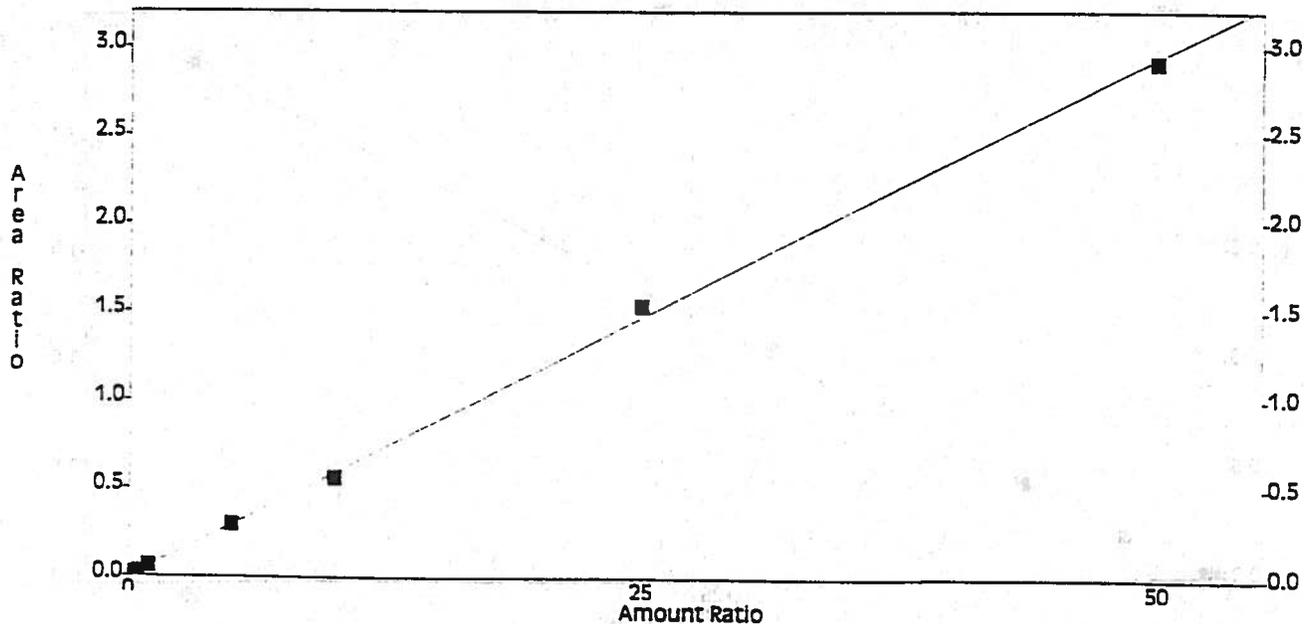
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 17.0009 x Area + 0.019378

R² = 0.999197 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used
 Printed : Jun 04, 1996 16:29:30
 Channel : B
 Peak : BRDICLMETHANE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0062	0.4	0.01553	0.0062							0
2	0.0074	0.5	0.01488	0.0074							0
3	0.0261	1	0.02613	0.0261							0
4	0.1987	5	0.03975	0.1987							0
5	0.4426	10	0.04426	0.4426							0
6	0.6928	25	0.02771	0.6928*							0
7	2.3513	50	0.04703	2.3513							0

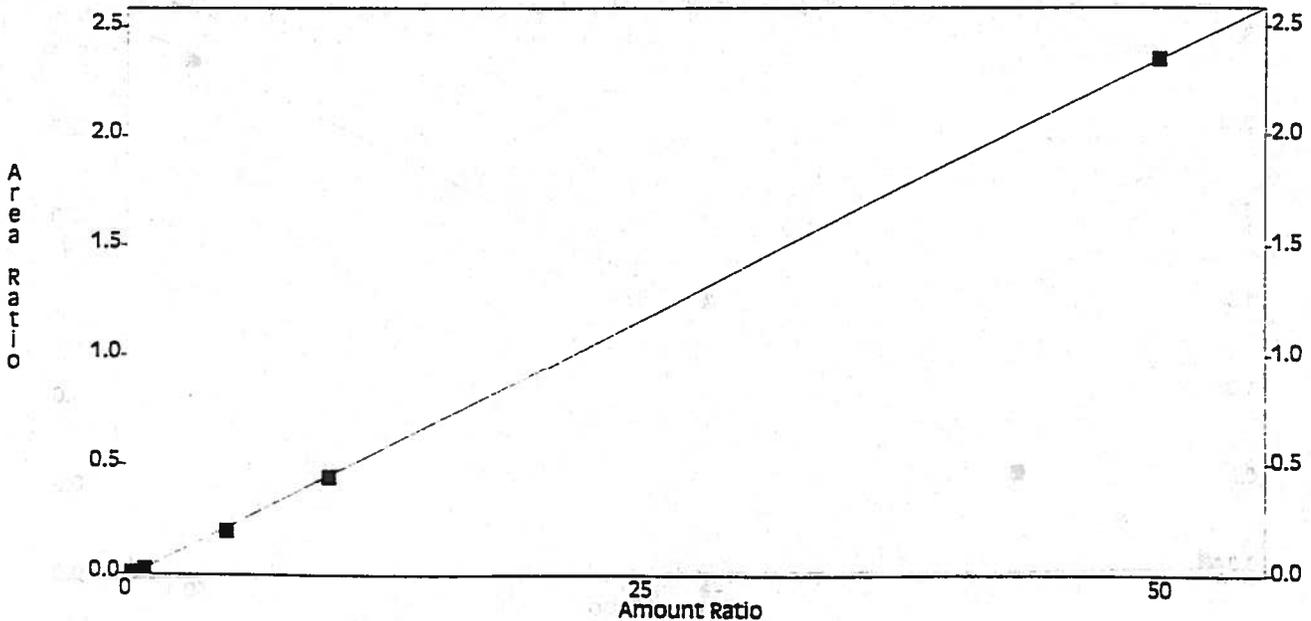
Calib Flag: Replace

Average RF: 0.031261
 RF StdDev: 0.0143648
 RF %RSD: 45.9512

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 21.0783 x Area + 0.497229
 R² = 0.999888 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:30

Channel : B

Peak : DIBROMOMETHANE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0023	0.4	0.005712	0.0023*							0
2	0.0022	0.5	0.004495	0.0022							0
3	0.0142	1	0.01422	0.0142							0
4	0.1668	5	0.03336	0.1668							0
5	0.3107	10	0.03107	0.3107							0
6	0.7048	25	0.02819	0.7048*							0
7	2.0346	50	0.04069	2.0346							0

Calib Flag: Replace

Average RF: 0.0247678

RF StdDev: 0.0149116

RF %RSD: 60.2056

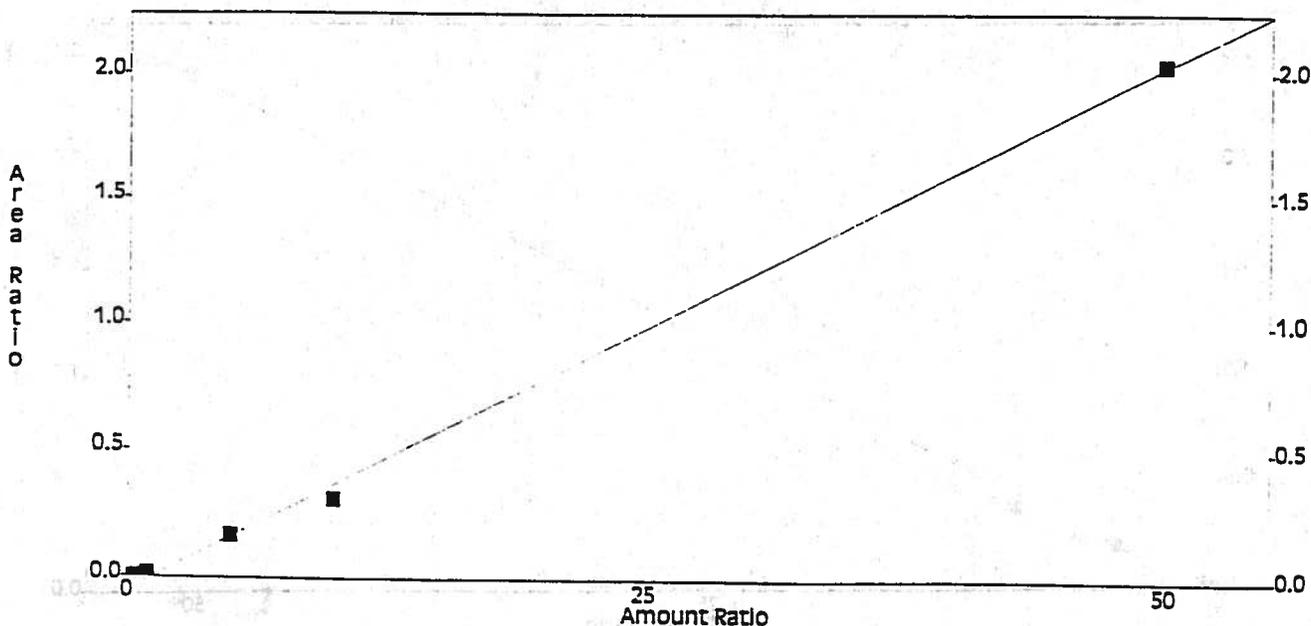
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 24.1356 x Area + 1.09396
 R² = 0.998483

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:31

Channel : B

Peak : CIS 1,3-DCPE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0105	0.4	0.02626	0.0105							0
2	0.0098	0.5	0.01963	0.0098*							0
3	0.0257	1	0.02566	0.0257							0
4	0.2052	5	0.04103	0.2052							0
5	0.3809	10	0.03809	0.3809							0
6	0.6025	25	0.0241	0.6025*							0
7	2.4055	50	0.04811	2.4055							0

Calib Flag: Replace

Average RF: 0.0358327

RF StdDev: 0.00971922

RF %RSD: 27.1239

RF Definition: Area / Amount

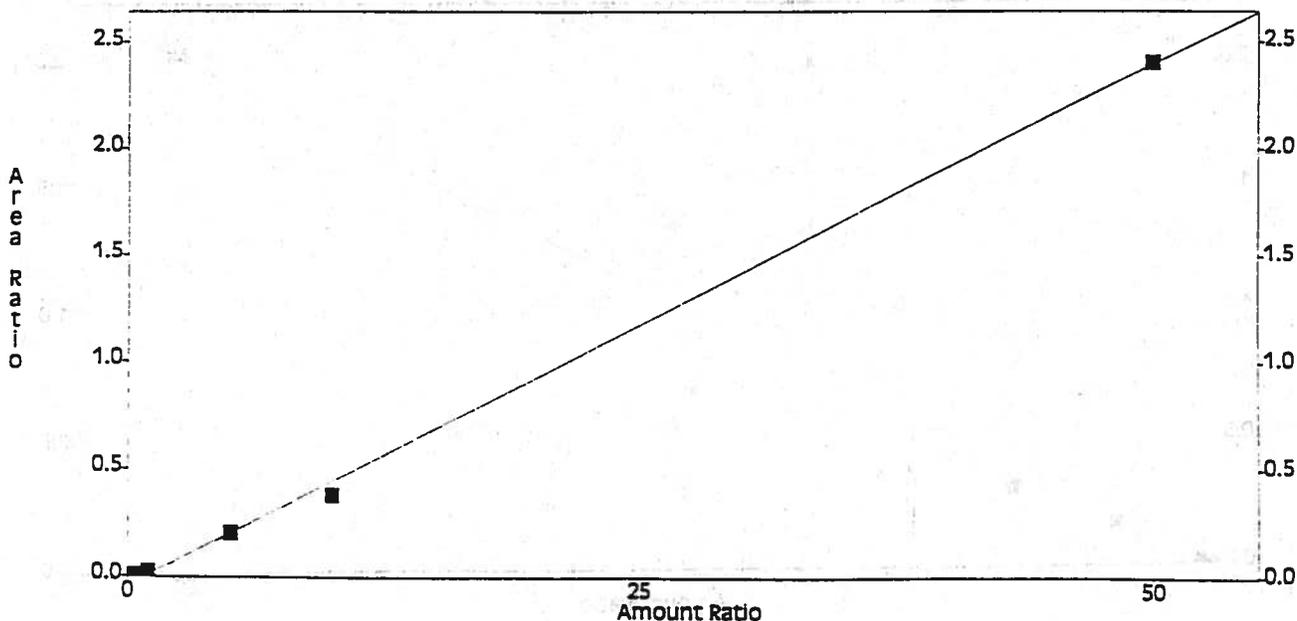
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 20.51 x Area + 0.860031

R² = 0.998618 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used
 Printed : Jun 04, 1996 16:29:31
 Channel : B
 Peak : TRANS 1,3-DCPE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0073	0.4	0.01817	0.0073							0
2	0.0056	0.5	0.0112	0.0056*							0
3	0.0262	1	0.02621	0.0262							0
4	0.1719	5	0.03437	0.1719							0
5	0.3453	10	0.03453	0.3453							0
6	0.4632	25	0.01853	0.4632*							0
7	2.1527	50	0.04305	2.1527							0

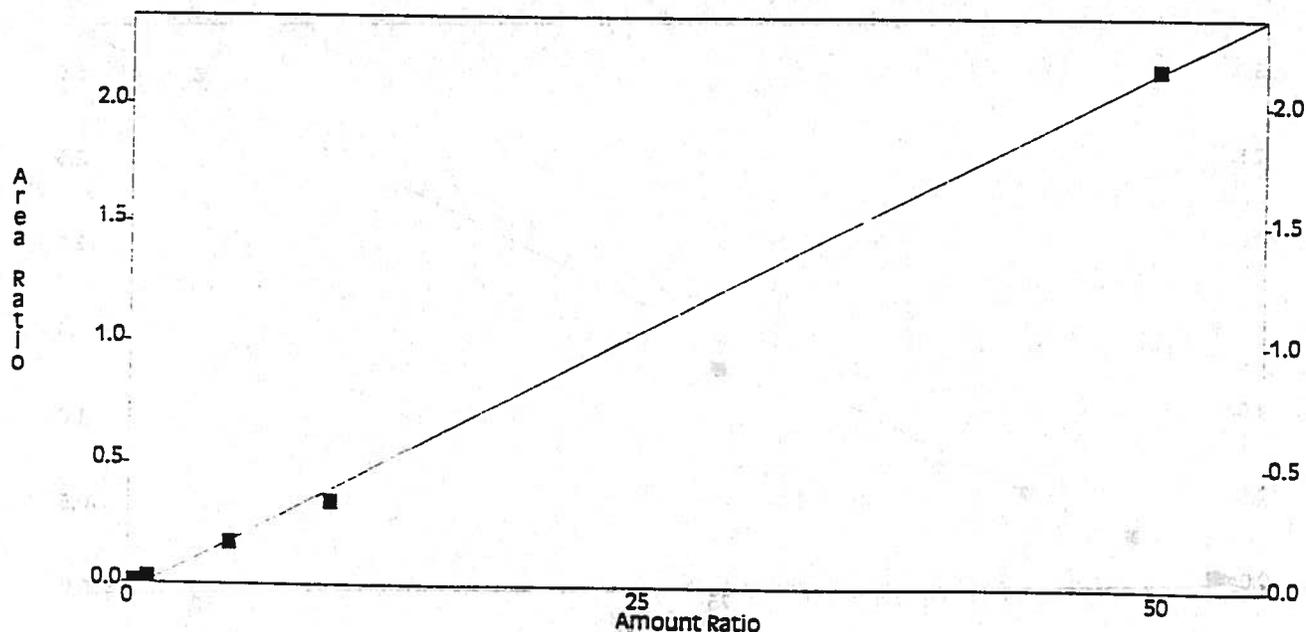
Calib Flag: Replace

Average RF: 0.031268
 RF StdDev: 0.00943811
 RF %RSD: 30.1846

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 22.9002 x Area + 0.898334
 R² = 0.998749 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met * - Replicate Not Used

Printed : Jun 04, 1996 16:29:32

Channel : B

Peak : 1,1,2-TCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0136	0.4	0.03392	0.0136							0
2	0.0181	0.5	0.03615	0.0181							0
3	0.0435	1	0.04348	0.0435							0
4	0.2933	5	0.05865	0.2933							0
5	0.5630	10	0.0563	0.5630							0
6	1.2854	25	0.05142	1.2854							0
7	3.0127	50	0.06025	3.0127							0

Calib Flag: Replace

Average RF: 0.0485978

RF StdDev: 0.0108081

RF %RSD: 22.2399

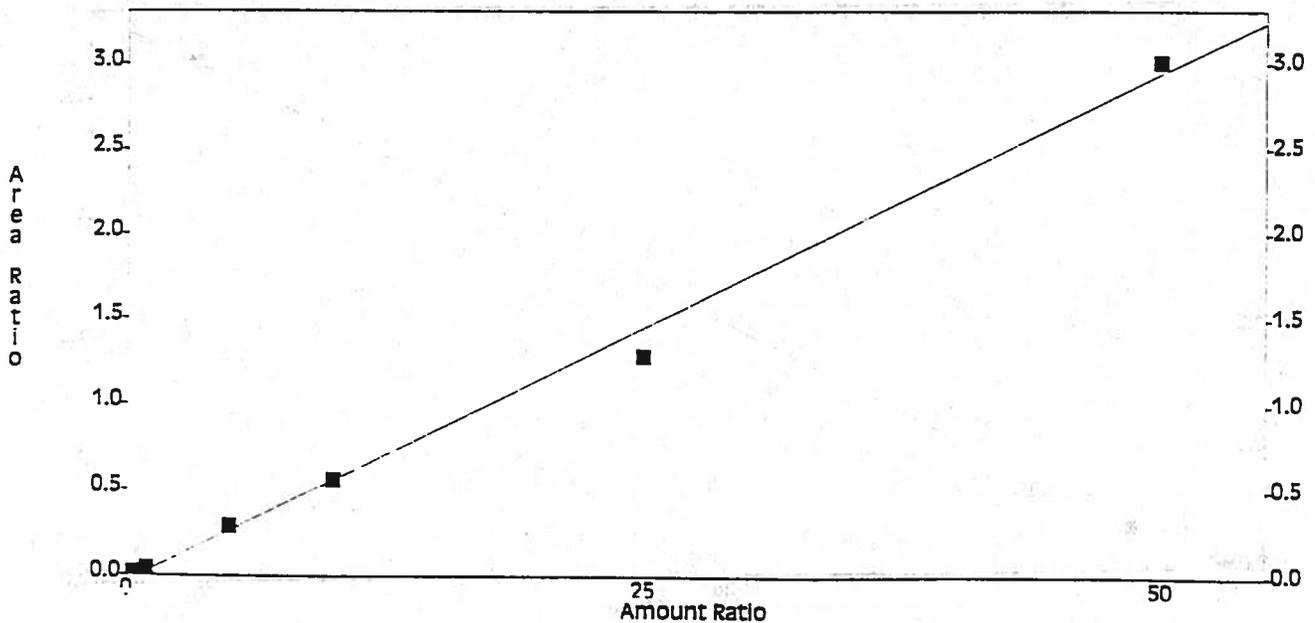
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 16.7792 x Area + 0.592994
R² = 0.995076 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

Printed : Jun 04, 1996 16:29:32

Channel : B

Peak : 1,3 DCPA/PCE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0339	0.8	0.04238	0.0339							0
2	0.0461	1	0.04607	0.0461							0
3	0.1079	2	0.05393	0.1079							0
4	0.5781	10	0.05781	0.5781							0
5	1.2647	20	0.06323	1.2647							0
6	3.1358	50	0.06272	3.1358							0
7	6.1836	100	0.06184	6.1836							0

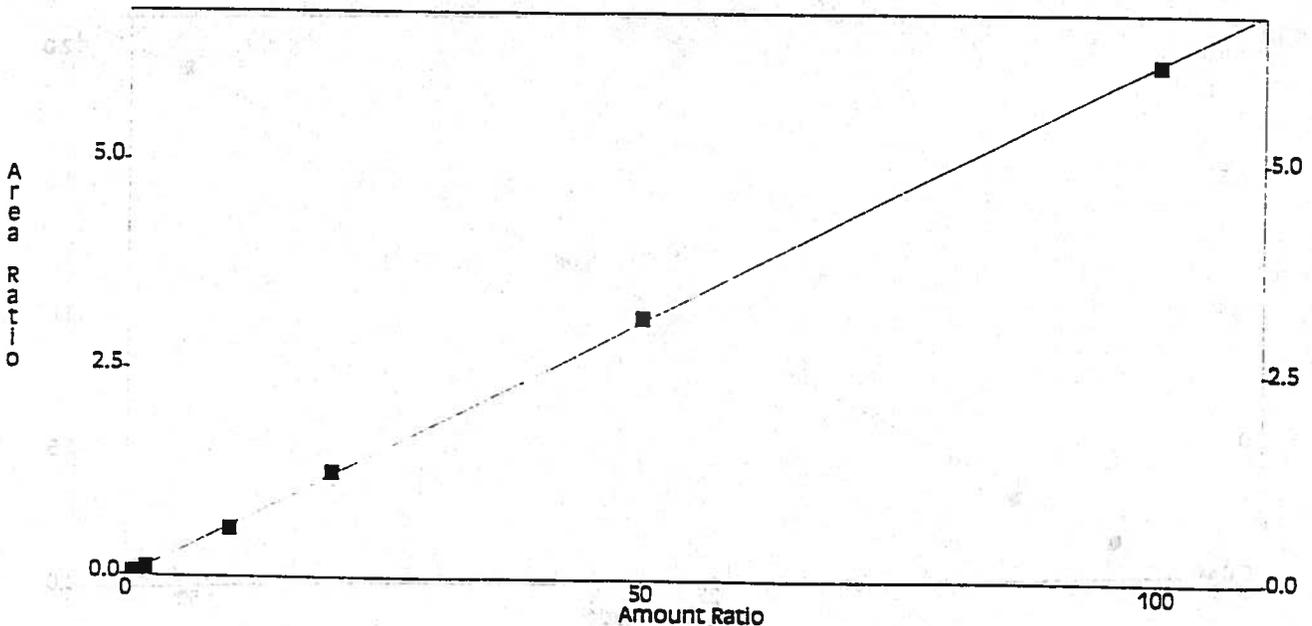
Calib Flag: Replace

Average RF: 0.0554263
RF StdDev: 0.00837345
RF %RSD: 15.1074

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 16.0837 x Area + 0.178526
R² = 0.999869 ✓

Internal Standard Curve - Scaling: None



Printed : Jun 04, 1996 16:29:32

Channel : B

Peak : DIBRCLMETHANE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0044	0.4	0.01101	0.0044							0
2	0.0009	0.5	0.001712	0.0009*							0
3	0.0095	1	0.009478	0.0095							0
4	0.1385	5	0.02769	0.1385							0
5	0.3030	10	0.0303	0.3030							0
6	0.4945	25	0.01978	0.4945*							0
7	1.9372	50	0.03874	1.9372							0

Calib Flag: Replace

Average RF: 0.0234442

RF StdDev: 0.0127366

RF %RSD: 54.3272

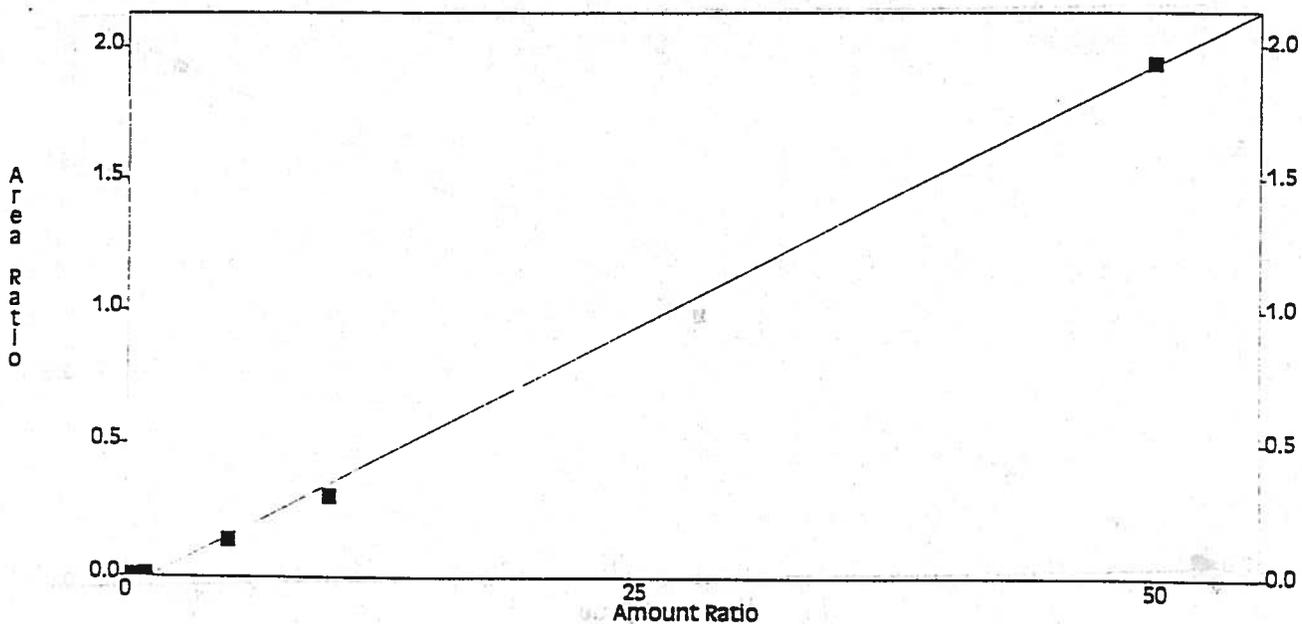
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 25.3115 x Area + 1.16833
 $R^2 = 0.998602$

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:33

Channel : B

Peak : 1,2-DBEA (EDB)

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
2	0.0009	0.5	0.001829	0.0009							0
3	0.0037	1	0.003676	0.0037							0
4	0.0895	5	0.01789	0.0895							0
5	0.1845	10	0.01845	0.1845							0
6	0.5712	25	0.02285	0.5712							0
7	1.1779	50	0.02356	1.1779							0

Calib Flag: Replace

Average RF: 0.0147088

RF StdDev: 0.00955284

RF %RSD: 64.9466

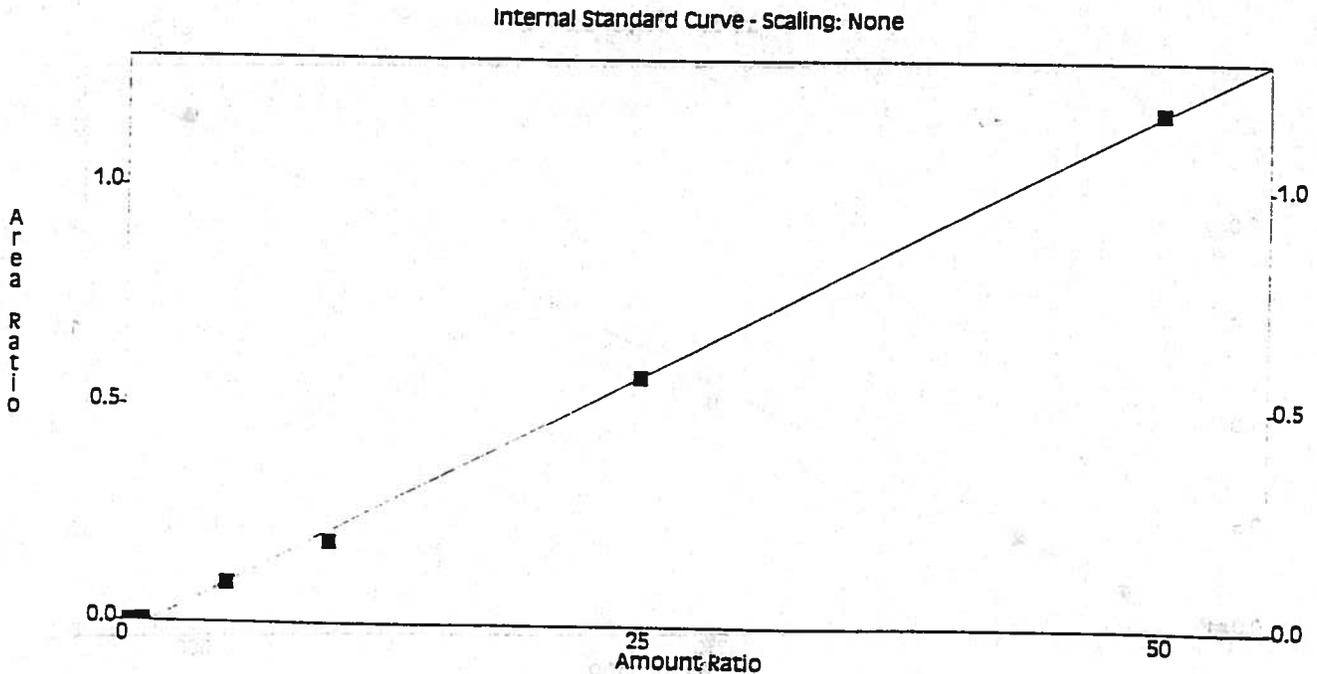
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 41.6129 x Area + 1.18725

R² = 0.998931 ✓



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:33

Channel : B

Peak : 1CL4FBZ (SURR)

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0124		4	0.003088	0.0124						0
2	0.0567		5	0.01134	0.0567*						0
3	0.0416		10	0.00416	0.0416						0
4	0.1980		50	0.00396	0.1980						0
5	0.4798		100	0.004798	0.4798						0
6	1.1487		250	0.004595	1.1487						0
7	2.5748		500	0.00515	2.5748						0

Calib Flag: Replace

Average RF: 0.00429188

RF StdDev: 0.000729378

RF %RSD: 16.9944

RF Definition: Area / Amount

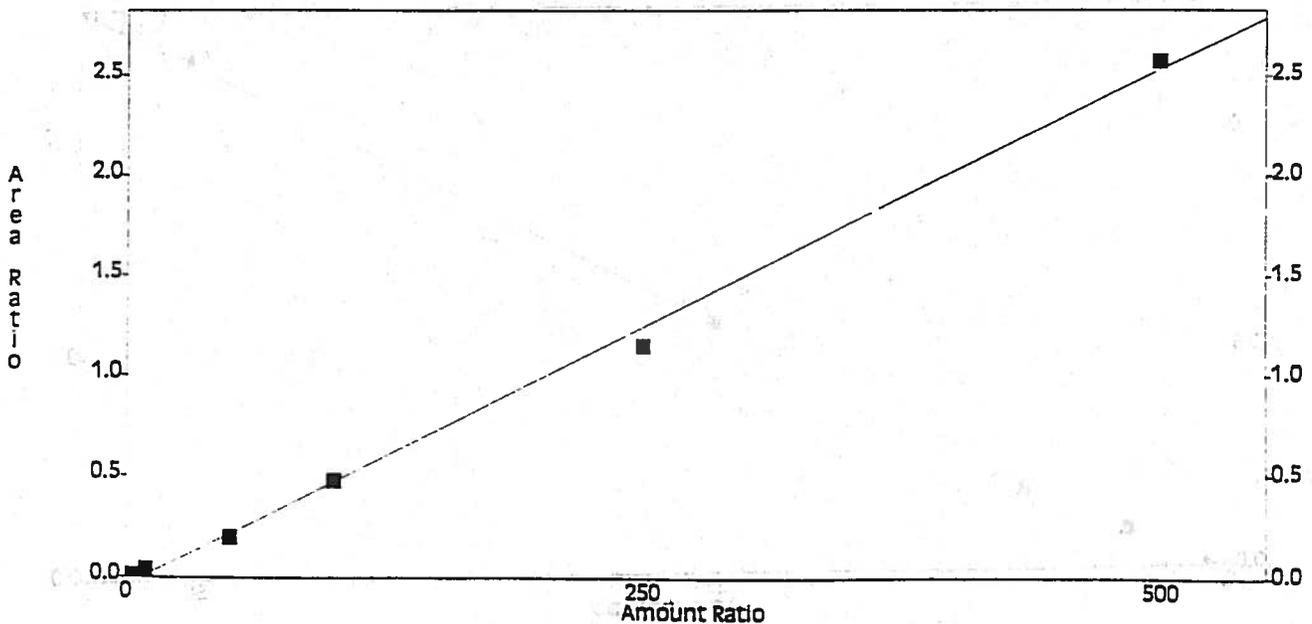
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 194.261 x Area + 8.08497

R² = 0.997236 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:34

Channel : B

Peak : CHLOROBENZENE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0044	0.4	0.01109	0.0044							0
2	0.0064	0.5	0.0128	0.0064							0
3	0.0156	1	0.01557	0.0156							0
4	0.1076	5	0.02153	0.1076							0
5	0.2270	10	0.0227	0.2270							0
6	0.5919	25	0.02368	0.5919							0
7	1.3173	50	0.02635	1.3173							0

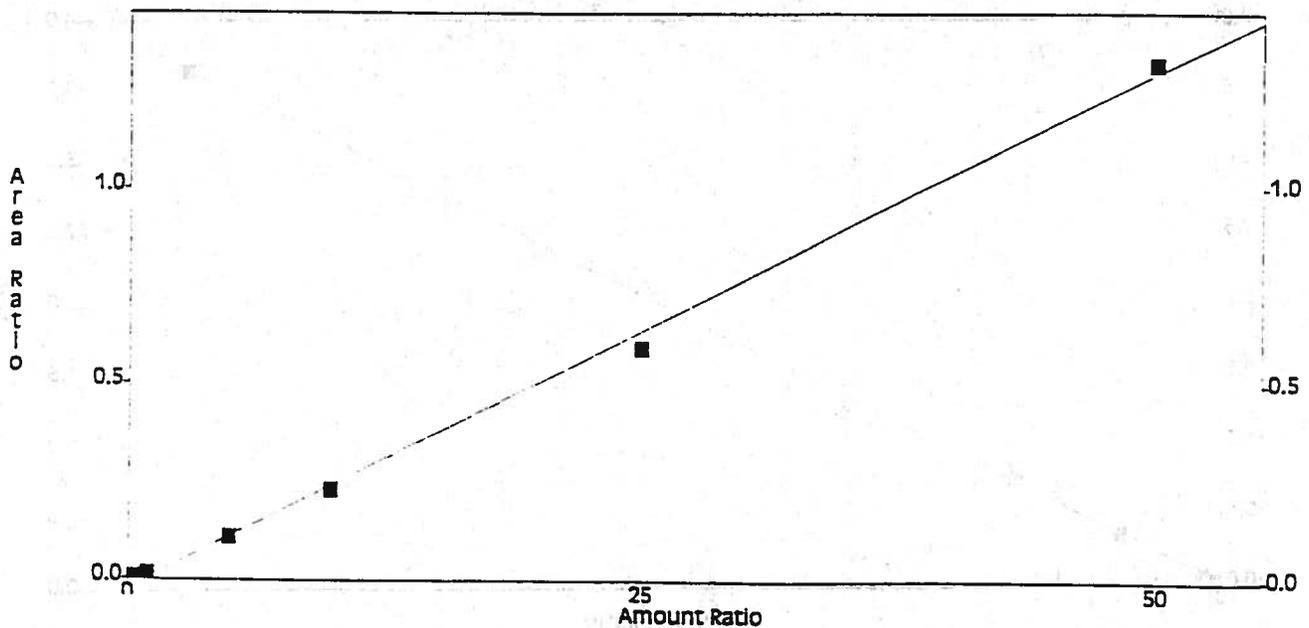
Calib Flag: Replace

Average RF: 0.019101
RF StdDev: 0.00589673
RF %RSD: 30.8714

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 38.0001 x Area + 0.804282
 $R^2 = 0.997669$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:34

Channel : B

Peak : 1,1,1,2-PCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0172	0.4	0.04312	0.0172							0
2	0.0250	0.5	0.05008	0.0250							0
3	0.0691	1	0.06914	0.0691							0
4	0.3596	5	0.07193	0.3596							0
5	0.8143	10	0.08143	0.8143							0
6	1.6158	25	0.06463	1.6158*							0
7	3.6518	50	0.07304	3.6518							0

Calib Flag: Replace

Average RF: 0.0647882

RF StdDev: 0.0148392

RF %RSD: 22.9041

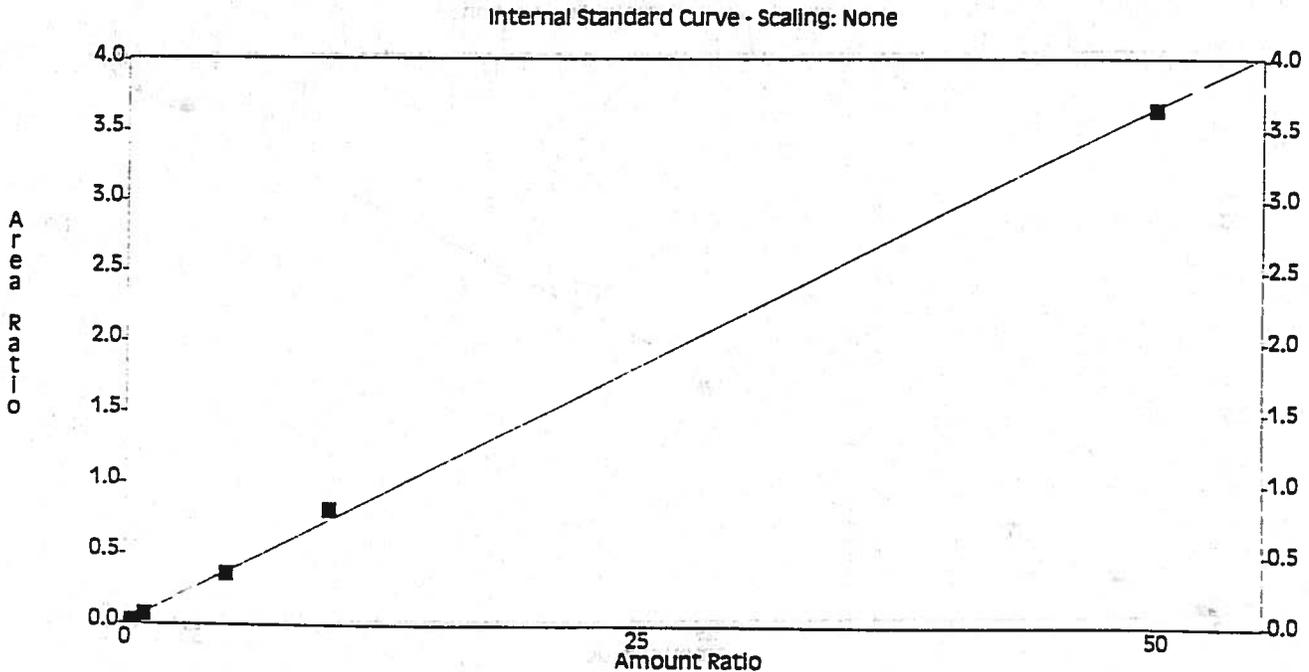
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 13.6599 x Area - 0.0901878

R² = 0.999314 ✓



Method : c:\ezchrom\methods\lvoa0603.met * - Replicate Not Used

Printed : Jun 04, 1996 16:29:35

Channel : B

Peak : BROMOFORM

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
2	0.0007	0.5	0.001459	0.0007							0
3	0.0042	1	0.004169	0.0042							0
4	0.0610	5	0.01221	0.0610							0
5	0.1427	10	0.01427	0.1427							0
6	0.2177	25	0.00871	0.2177*							0
7	1.0234	50	0.02047	1.0234							0

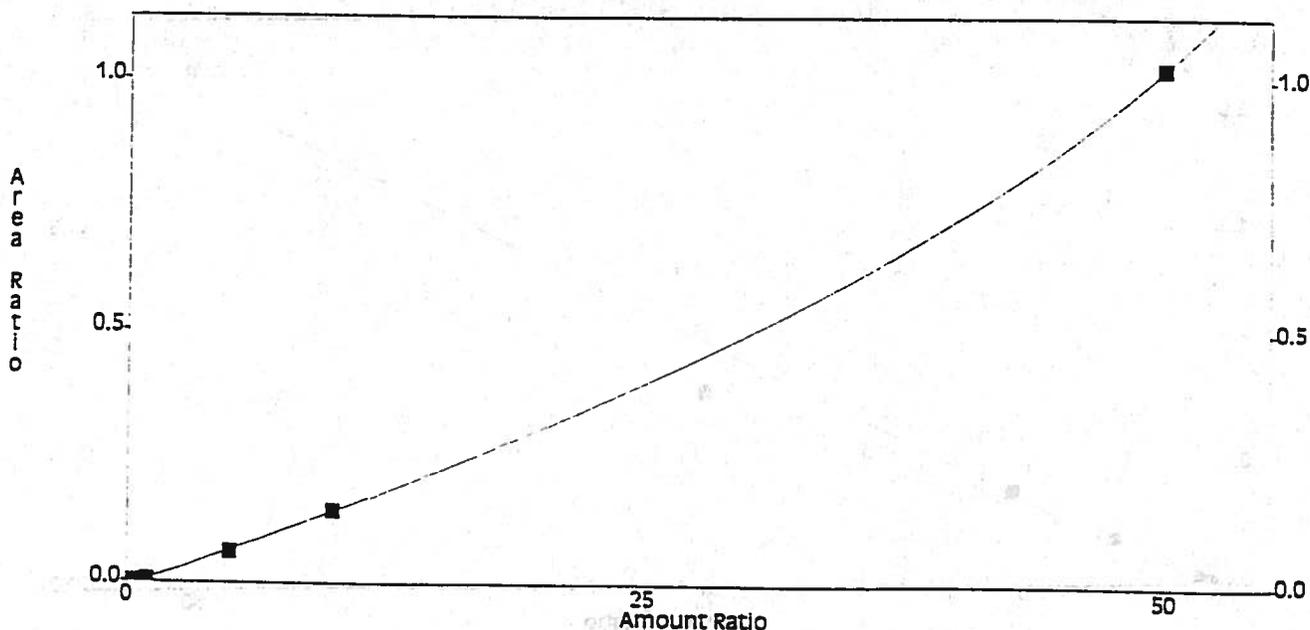
Calib Flag: Replace

Average RF: 0.0105143
RF StdDev: 0.00771799
RF %RSD: 73.4046

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Quadratic Fit: Amount = -20.5531 x Area^2 + 69.2681 x Area + 0.636664
R^2 = 0.999945 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:35

Channel : B

Peak : 1,1,2,2-PCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0095	0.4	0.02382	0.0095							0
2	0.0126	0.5	0.02521	0.0126							0
3	0.0315	1	0.03153	0.0315							0
4	0.1961	5	0.03922	0.1961							0
5	0.3999	10	0.03999	0.3999							0
6	0.8203	25	0.03281	0.8203							0
7	2.1851	50	0.0437	2.1851							0

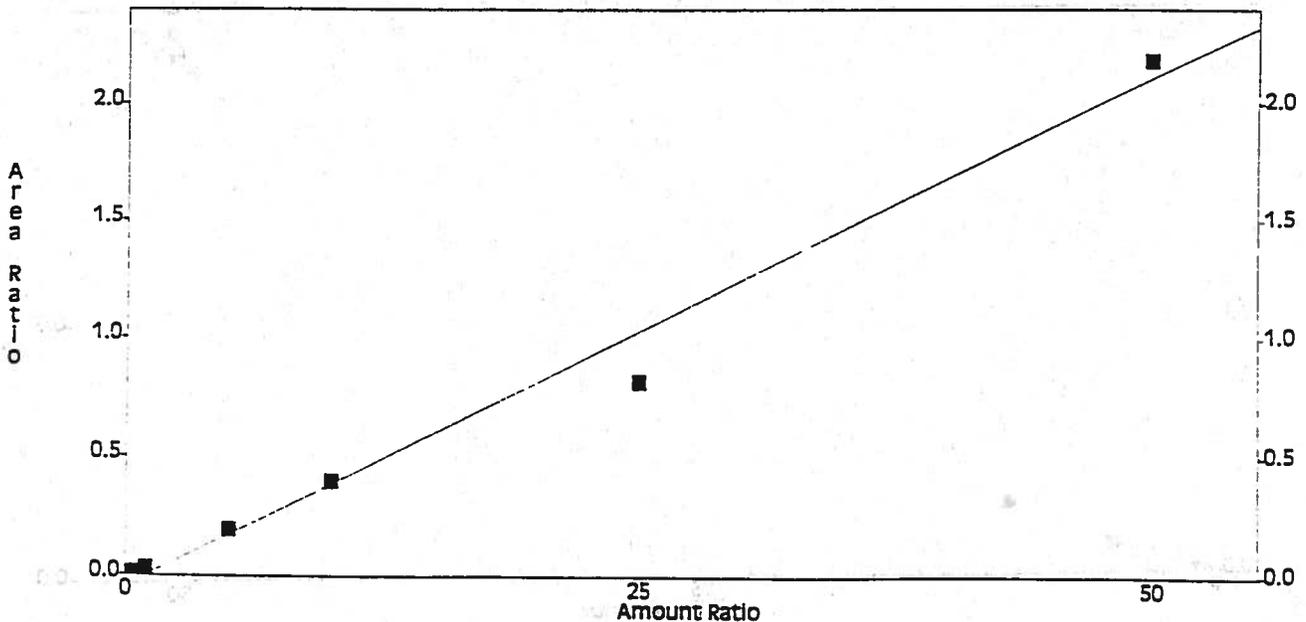
Calib Flag: Replace

Average RF: 0.0337562
RF StdDev: 0.00758636
RF %RSD: 22.474

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 23.2162 x Area + 1.00592
R² = 0.98544

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:36

Channel : B

Peak : 1,2,3-TCPA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0085	0.4	0.02125	0.0085							0
2	0.0080	0.5	0.01598	0.0080*							0
3	0.0248	1	0.02481	0.0248							0
4	0.1467	5	0.02934	0.1467							0
5	0.2836	10	0.02836	0.2836							0
6	0.6393	25	0.02557	0.6393*							0
7	1.7823	50	0.03565	1.7823							0

Calib Flag: Replace

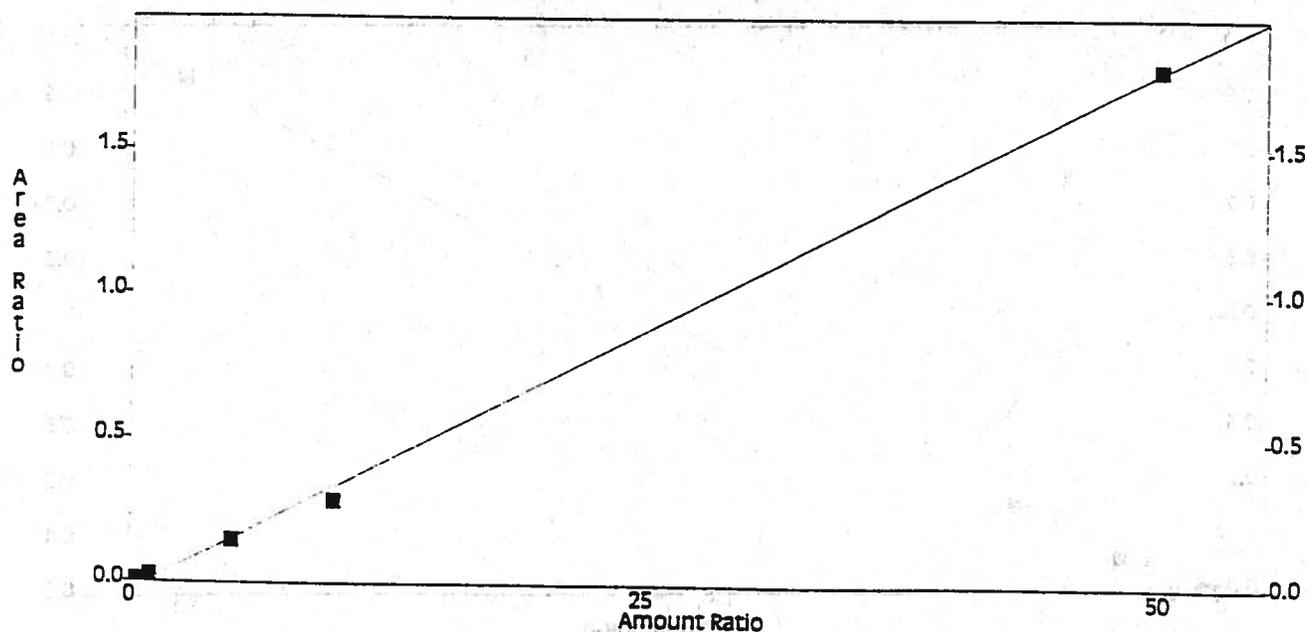
Average RF: 0.0278796
 RF StdDev: 0.00538816
 RF %RSD: 19.3265

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 27.6981 x Area + 0.838426
 R² = 0.998574



Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:36

Channel : B

Peak : BROMOBENZENE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0017	0.4	0.004146	0.0017							0
2	0.0015	0.5	0.003064	0.0015*							0
3	0.0045	1	0.004532	0.0045							0
4	0.0617	5	0.01234	0.0617							0
5	0.1600	10	0.016	0.1600							0
6	0.3793	25	0.01517	0.3793*							0
7	0.9405	50	0.01881	0.9405							0

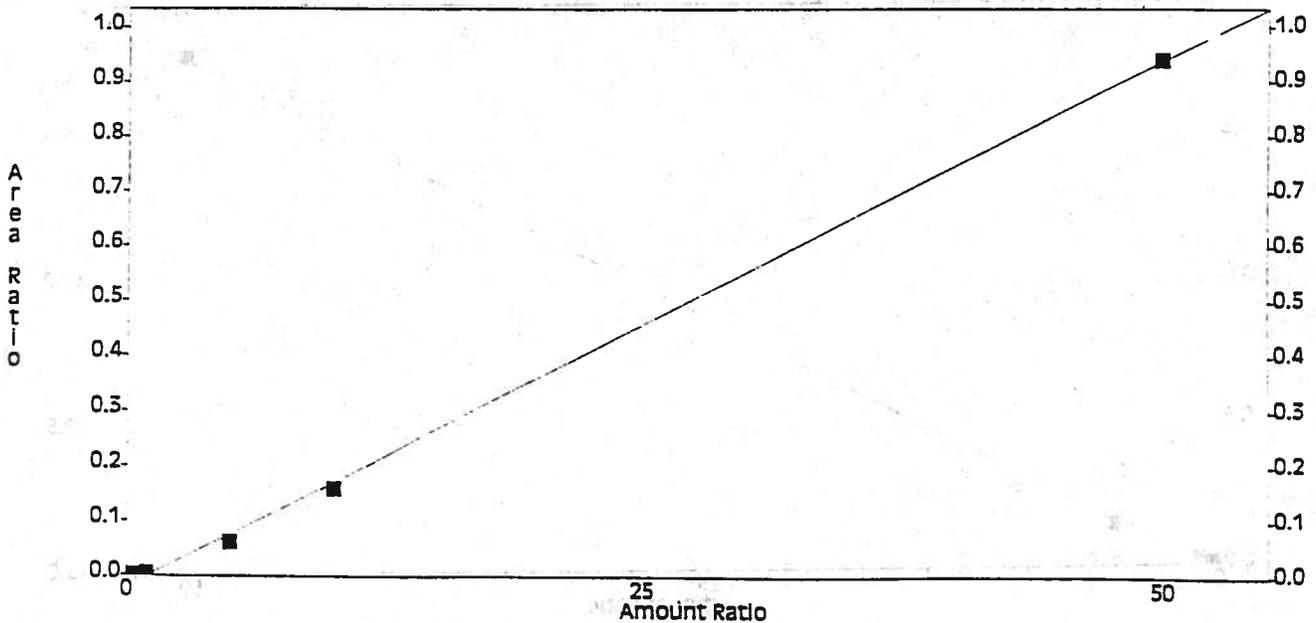
Calib Flag: Replace

Average RF: 0.0111657
RF StdDev: 0.00664171
RF %RSD: 59.4831

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 52.1459 x Area + 1.09479
R² = 0.999124

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:37

Channel : B

Peak : 2-CL TOLUENE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0046	0.4	0.01156	0.0046							0
2	0.0061	0.5	0.0122	0.0061							0
3	0.0158	1	0.01582	0.0158							0
4	0.0998	5	0.01996	0.0998							0
5	0.2379	10	0.02379	0.2379							0
6	0.6039	25	0.02416	0.6039							0
7	1.2932	50	0.02586	1.2932							0

Calib Flag: Replace

Average RF: 0.0190487

RF StdDev: 0.00590704

RF %RSD: 31.0102

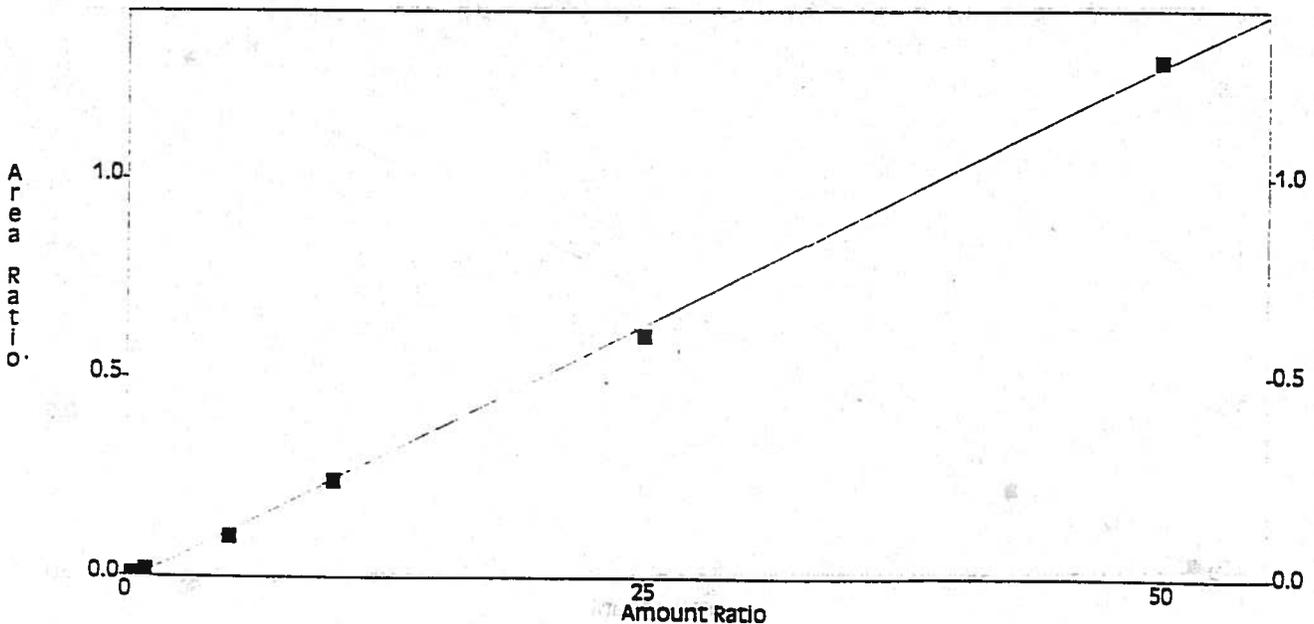
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 38.5679 x Area + 0.669392
R² = 0.998987

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met
 Printed : Jun 04, 1996 16:29:37
 Channel : B
 Peak : 4-CL TOLUENE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0069	0.4	0.01724	0.0069							0
2	0.0062	0.5	0.01245	0.0062*							0
3	0.0220	1	0.02203	0.0220							0
4	0.1495	5	0.02989	0.1495							0
5	0.2646	10	0.02646	0.2646							0
6	0.6797	25	0.02719	0.6797*							0
7	1.6112	50	0.03222	1.6112							0

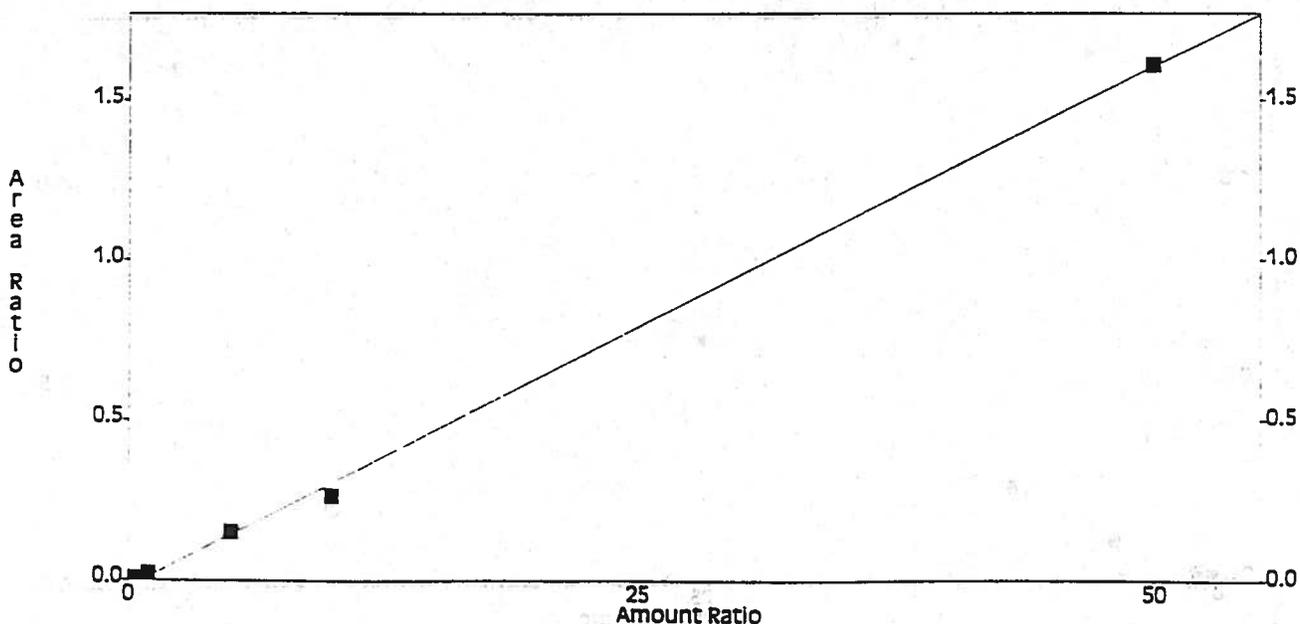
Calib Flag: Replace

Average RF: 0.0255695
 RF StdDev: 0.00603434
 RF %RSD: 23.5997

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 30.7331 x Area + 0.653664
 $R^2 = 0.998918$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met * - Replicate Not Used

Printed : Jun 04, 1996 16:29:37

Channel : B

Peak : 1,3-DCB

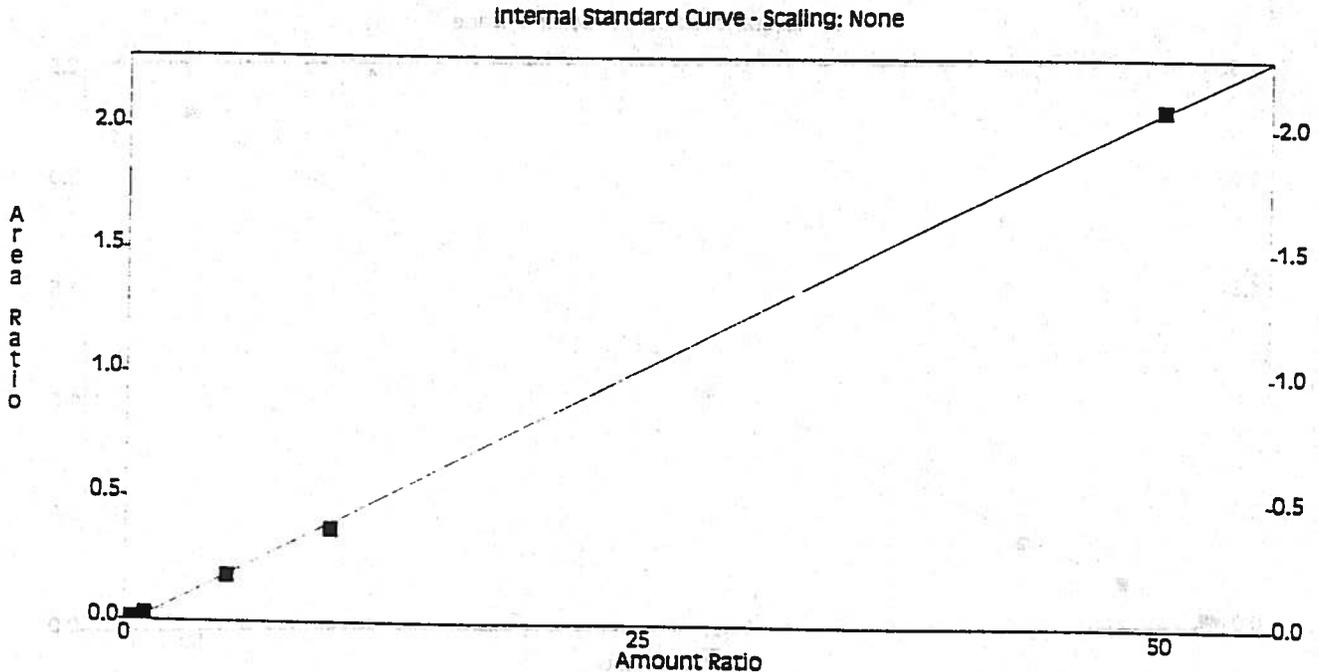
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0086	0.4	0.02155	0.0086							0
2	0.0087	0.5	0.01746	0.0087							0
3	0.0262	1	0.02616	0.0262							0
4	0.1840	5	0.0368	0.1840							0
5	0.3729	10	0.03729	0.3729							0
6	0.8503	25	0.03401	0.8503							0
7	2.0801	50	0.0416	2.0801							0

Calib Flag: Replace

Average RF: 0.0301444
RF StdDev: 0.00976888
RF %RSD: 32.407

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 23.8574 x Area + 0.491815
R² = 0.999711 ✓



Method : c:\ezchrom\methods\1voa0603.met * - Replicate Not Used
 Printed : Jun 04, 1996 16:29:38
 Channel : B
 Peak : 1,4-DCB

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0092	0.4	0.02297	0.0092							0
2	0.0106	0.5	0.02128	0.0106							0
3	0.0293	1	0.02929	0.0293							0
4	0.1984	5	0.03967	0.1984							0
5	0.3875	10	0.03875	0.3875							0
6	1.0743	25	0.04297	1.0743							0
7	2.3077	50	0.04615	2.3077							0

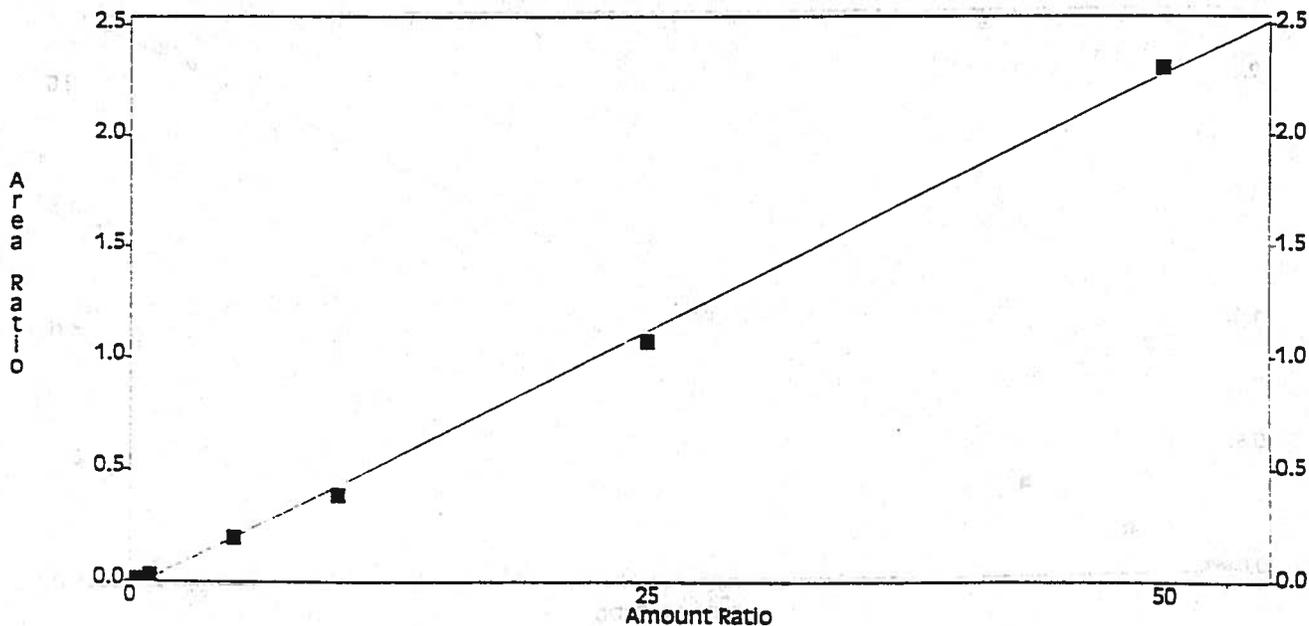
Calib Flag: Replace

Average RF: 0.0344418
 RF StdDev: 0.00989254
 RF %RSD: 28.7225

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 21.6286/x Area + 0.716766
 $R^2 = 0.998584$

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:38

Channel : B

Peak : 1,2-DCB

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0105	0.4	0.02635	0.0105							0
2	0.0113	0.5	0.02252	0.0113							0
3	0.0280	1	0.02796	0.0280							0
4	0.1714	5	0.03428	0.1714							0
5	0.3614	10	0.03614	0.3614							0
6	0.9314	25	0.03726	0.9314							0
7	2.0405	50	0.04081	2.0405							0

Calib Flag: Replace

Average RF: 0.0321879

RF StdDev: 0.00665219

RF %RSD: 20.6667

RF Definition: Area / Amount

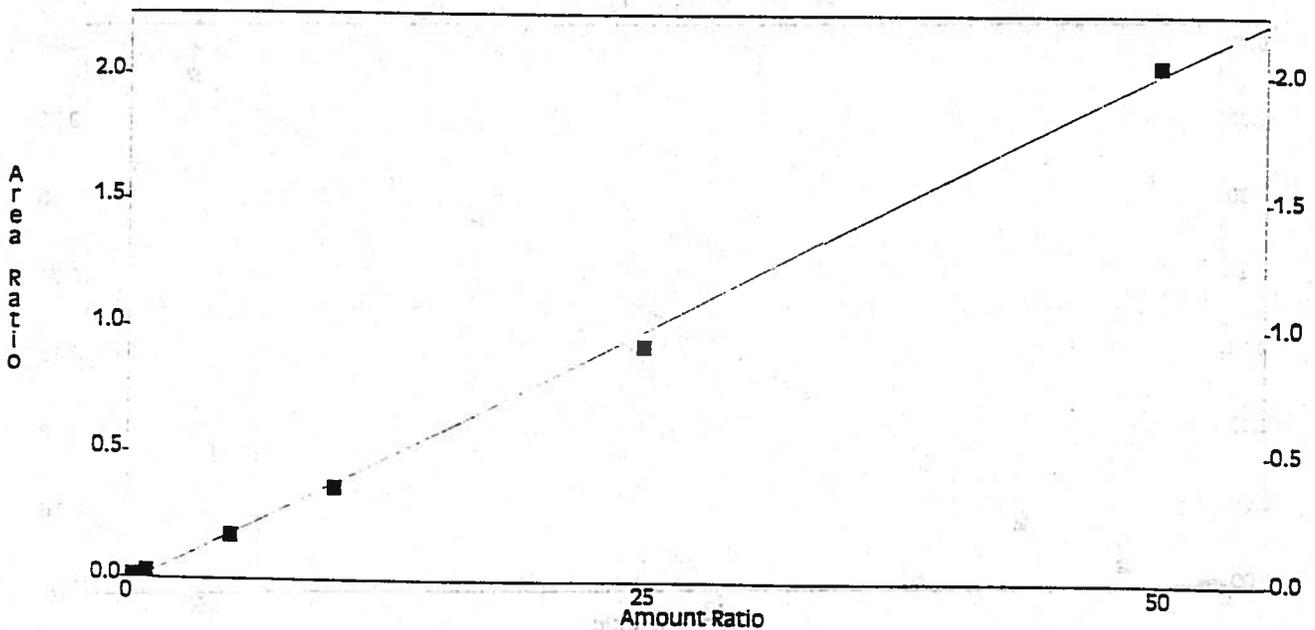
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 24.5486 x Area + 0.663096

R² = 0.998261 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:39

Channel : B

Peak : 1,2-DBr-3-CPA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD Ratio	Replic %RSD	Old Area Ratio
1	0.0005	0.4	0.001152	0.0005							0
2	0.0012	0.5	0.002331	0.0012*							0
3	0.0007	1	0.0006657	0.0007							0
4	0.0159	5	0.003175	0.0159							0
5	0.0505	10	0.005052	0.0505							0
6	0.1121	25	0.004482	0.1121*							0
7	0.3982	50	0.007964	0.3982							0

Calib Flag: Replace

Average RF: 0.00360192

RF StdDev: 0.00299735

RF %RSD: 83.2155

RF Definition: Area / Amount

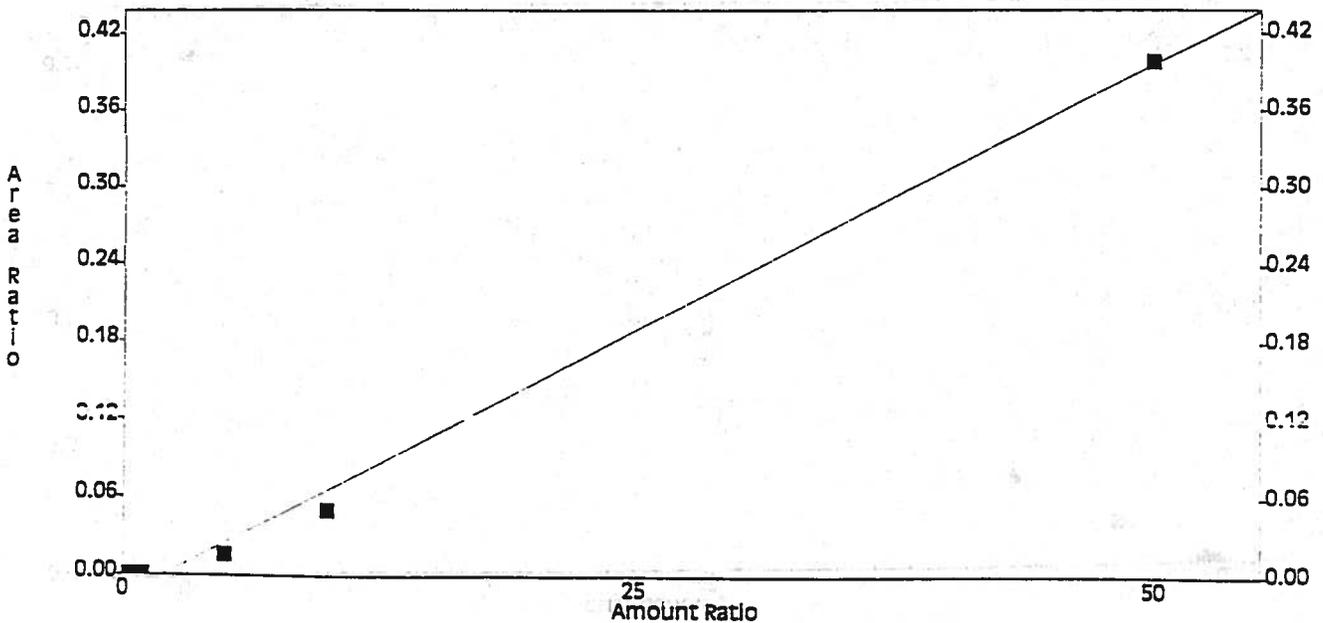
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 121.285 x Area + 1.98269

R² = 0.995037

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:39

Channel : B

Peak : 1,2,4-TCB

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0074	0.4	0.01838	0.0074							0
2	0.0023	0.5	0.004565	0.0023							0
3	0.0185	1	0.01847	0.0185							0
4	0.1614	5	0.03228	0.1614							0
5	0.2844	10	0.02844	0.2844							0
6	0.8104	25	0.03242	0.8104							0
7	1.9008	50	0.03802	1.9008							0

Calib Flag: Replace

Average RF: 0.027116

RF StdDev: 0.00863565

RF %RSD: 31.847

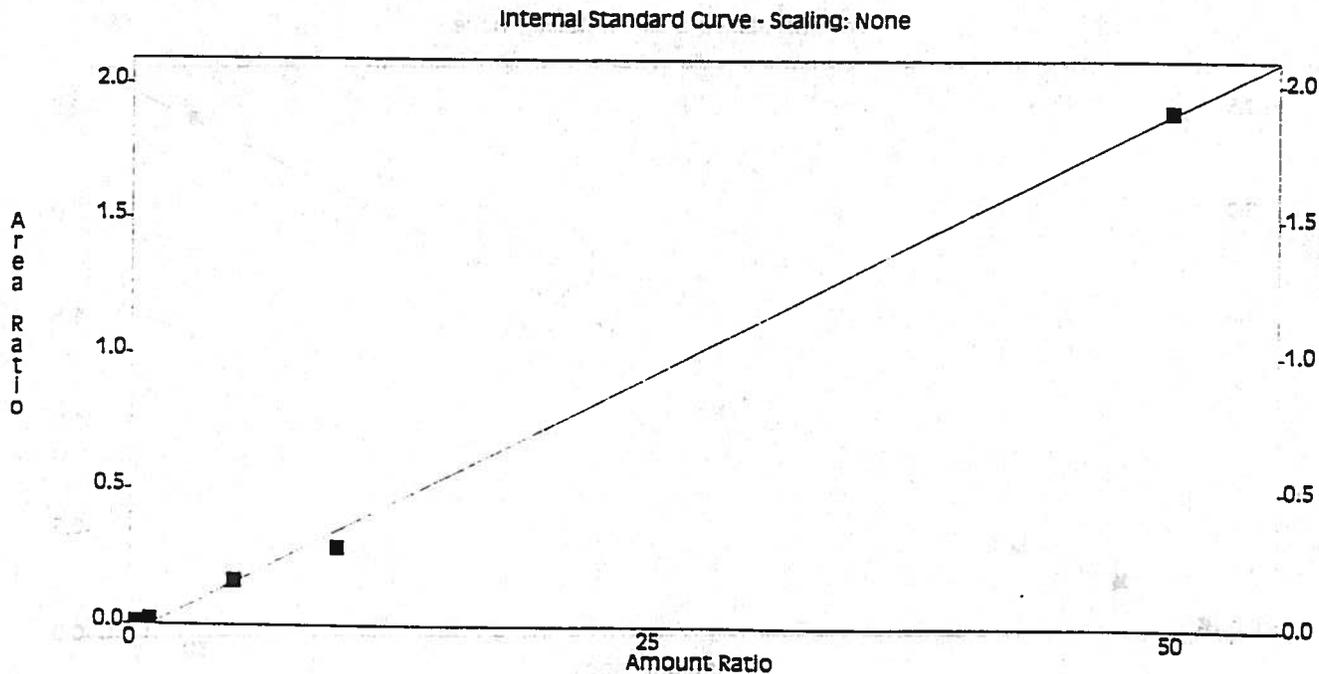
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 25.9019 x Area + 0.990119

R² = 0.997932



Method : c:\ezchrom\methods\lvoa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:40

Channel : B

Peak : HEXACL BUTADIENE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0547	0.4	0.1368	0.0547*							0
2	0.0029	0.5	0.005886	0.0029							0
3	0.0437	1	0.04368	0.0437							0
4	0.2539	5	0.05078	0.2539							0
5	0.4007	10	0.04007	0.4007							0
6	1.1699	25	0.04679	1.1699*							0
7	2.4671	50	0.04934	2.4671							0

Calib Flag: Replace

Average RF: 0.037951

RF StdDev: 0.0184378

RF %RSD: 48.5831

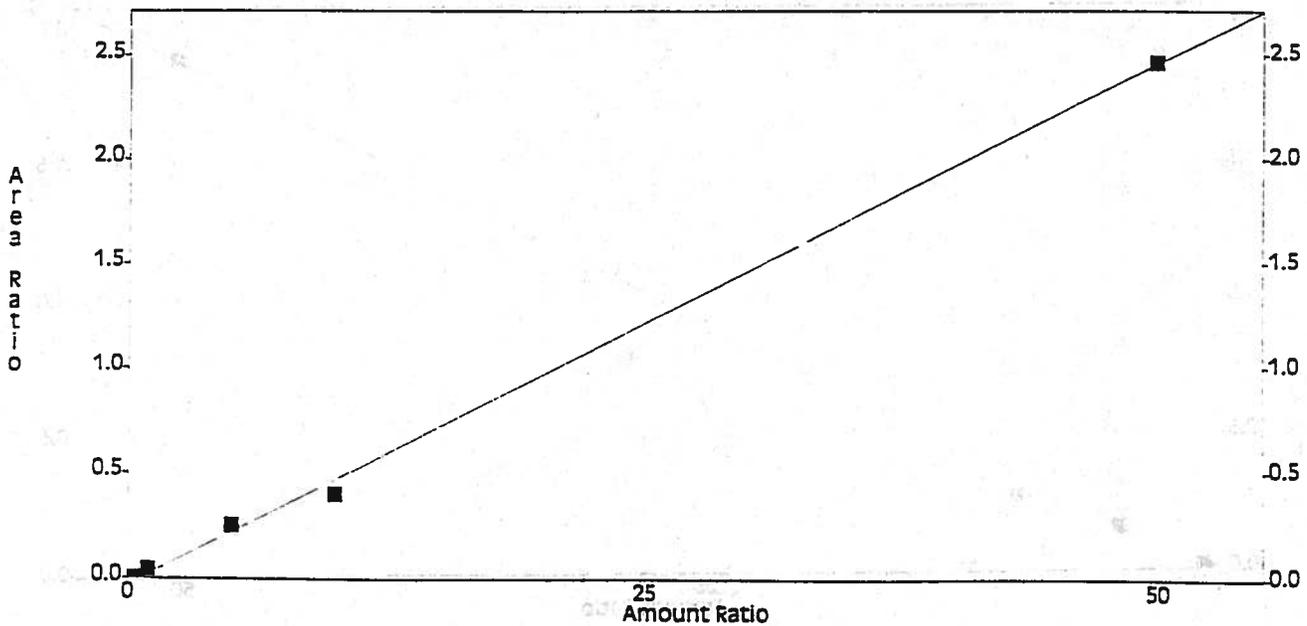
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 20.0978 x Area + 0.564734
 $R^2 = 0.998514$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\methods\1voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 16:29:40

Channel : B

Peak : 1,2,3-TCB

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0084	0.4	0.02103	0.0084							
2	0.0004	0.5	0.0007608	0.0004*							0
3	0.0144	1	0.01442	0.0144							0
4	0.1418	5	0.02837	0.1418							0
5	0.2460	10	0.0246	0.2460							0
6	0.7209	25	0.02883	0.7209							0
7	1.3892	50	0.02778	1.3892							0

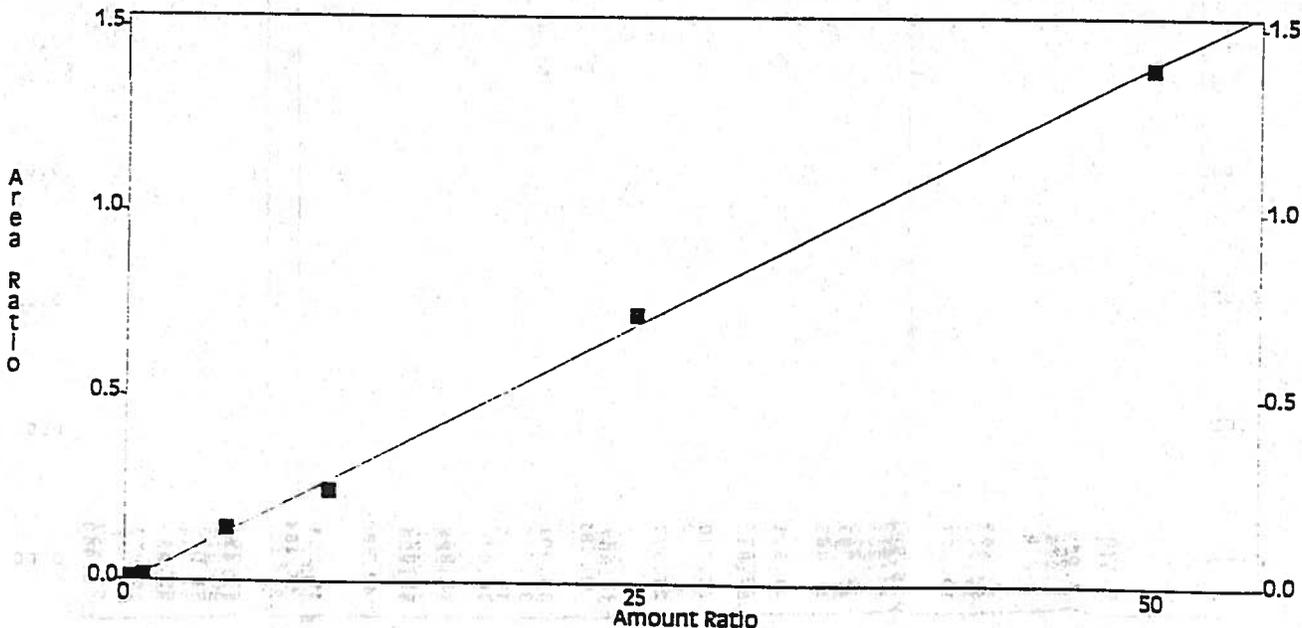
Calib Flag: Replace

Average RF: 0.0241706
 RF StdDev: 0.00561473
 RF %RSD: 23.2296

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 35.5227 * Area + 0.309735
 $R^2 = 0.99889$

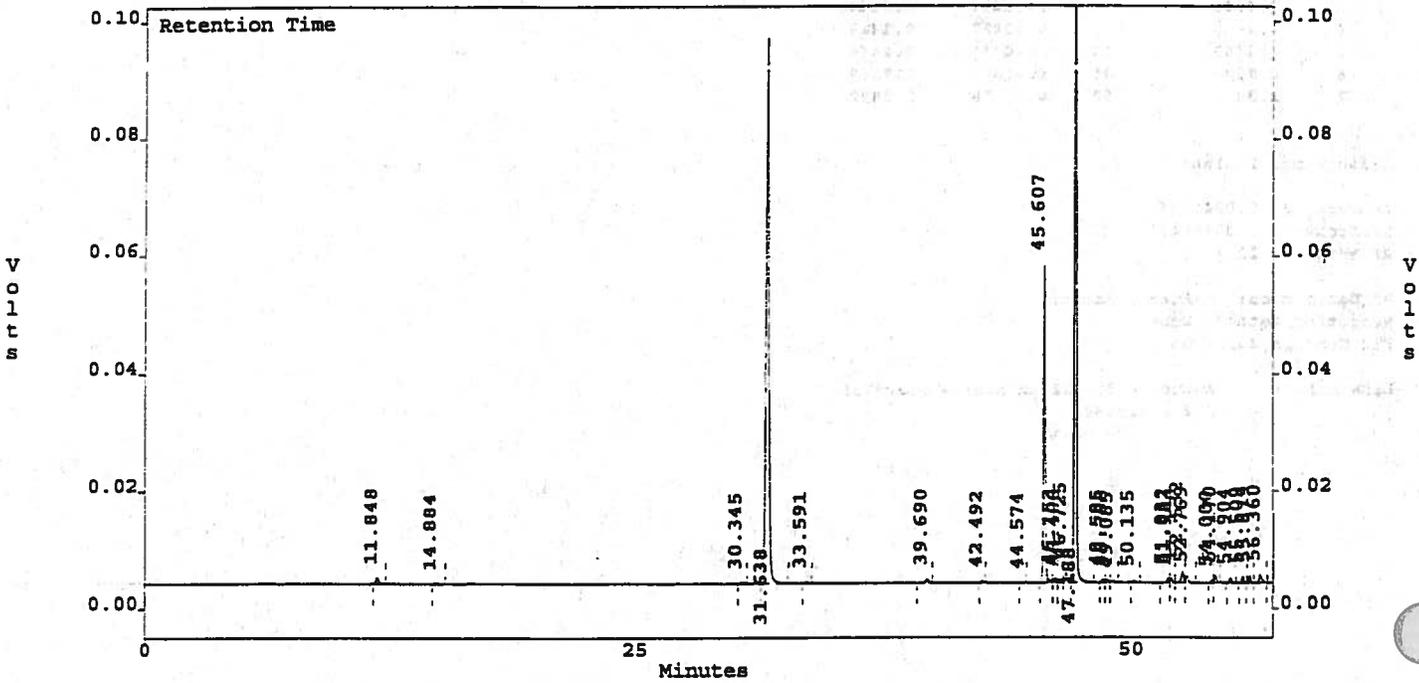
Internal Standard Curve - Scaling: None



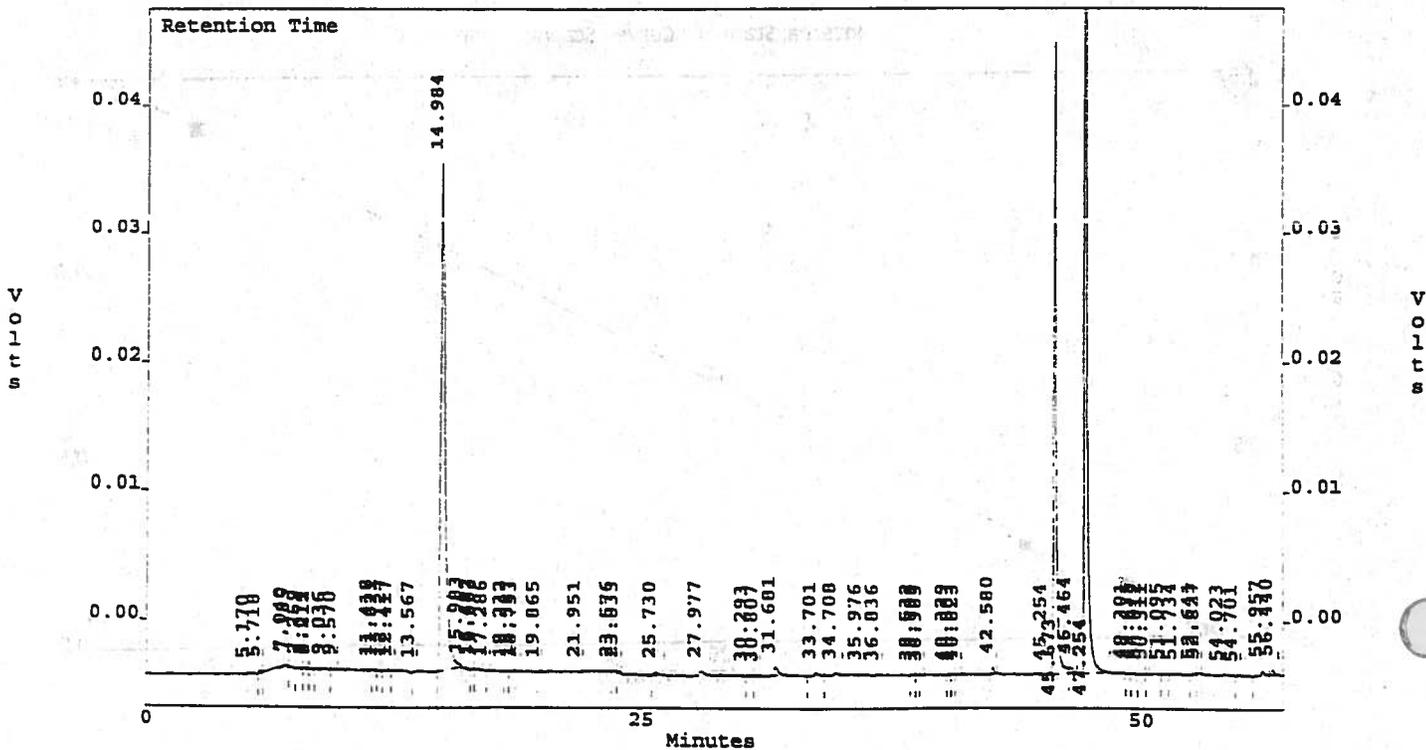
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.16
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : MTHD BLKw 16
 Acquired : Jun 04, 1996 09:38:21
 Printed : Jun 05, 1996 09:09:21

c:\ezchrom\data\160603.16 -- Channel A



c:\ezchrom\data\160603.16 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.16
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : MTHD BLKw 16
 Acquired : Jun 04, 1996 09:38:21
 Printed : Jun 05, 1996 09:09:27

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln (µg/L)	Compound
11.85	13070	0.0	0	0.00	
14.88	1847	0.0	0	0.00	
30.34	2297	1.9	38	0.38 <i>cmL</i>	Benzene
31.64	974408	5.0	100	1.00	Flbenzene (IS)
33.59	3043	1.6	32	0.32 <i>cmL</i>	Tce
39.69	5928	2.5	51	0.51 <i>cmL by AR</i>	Toluene
42.49	2735	2.0	41	0.41 <i>cmL</i>	Pce
44.57	1274	0.0	0	0.00	
45.61	353565	473.0	9459	94.59	1cl4fbz (surr) <i>95.1</i>
46.15	6177	2.5	50	0.50 <i>NC</i>	Chlorobenzene
46.41	4972	0.7	14	0.14 <i>cmL</i>	Ethylbenzene
46.73	13252	3.6	73	0.73 <i>↓</i>	M/P Xylene
47.19	980871	5.0	100	1.00	1cl2flbz (IS)
48.59	4294	2.5	50	0.50 <i>cmL by AR</i>	O Xylene
48.79	4219	2.9	58	0.58 <i>↓</i>	Styrene
49.08	2306	0.0	0	0.00	
50.13	3629	2.2	43	0.43 <i>cmL</i>	Isopropylbenzene
51.83	5752	3.0	61	0.61 <i>↓</i>	n-propylbenzene
51.98	5439	2.4	47	0.47 <i>↓</i>	Bromobenzene
52.53	15898	4.9	98	0.98 <i>↓</i>	1,3,5-tmb/2-cl tol
52.77	8877	2.8	56	0.56 <i>NC</i>	4-cl toluene
54.00	3826	3.1	63	0.63 <i>cmL</i>	t-butylbenzene
54.17	8631	2.6	52	0.52 <i>↓</i>	1,2,4-tmb
54.90	6528	3.7	75	0.75 <i>↓</i>	s-butylbenzene
55.51	7262	3.7	75	0.75 <i>↓</i>	p-isopropyltoluene
55.88	7748	2.0	40	0.40 <i>cmL</i>	1,3-dcb
56.36	13109	2.9	57	0.57	1,4-dcb
57.27	12144	4.2	83	0.83	n-butylbenzene
57.92	8181	2.8	57	0.57	1,2-dcb
60.19	2357	0.0	0	0.00	
64.20	7206	4.7	95	0.95 <i>NM</i>	1,2,4-tcb
64.62	16171	6.5	131	1.31 <i>↓</i>	Hexachlorobutadiene
65.02	8522	4.1	83	0.83	Napthalene
65.76	7858	2.8	57	0.57 <i>↓</i>	1,2,3-tcb
67.23	1640	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.16
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : MTHD BLKw 16
 Acquired : Jun 04, 1996 09:38:21
 Printed : Jun 05, 1996 09:09:27

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.17	1261	0.0	0	0.00	
5.72	1506	4.1	82	0.82	DCDFM
7.04	5756	0.0	0	0.00	
7.19	625	0.0	0	0.00	
7.76	744	0.0	0	0.00	
8.07	479	0.0	0	0.00	
8.21	471	8.8	176	1.76	BROMOMETHANE
9.04	3072	0.0	0	0.00	
9.57	1139	2.7	54	0.54	TCFM
11.42	1140	4.7	93	0.93	FREON 113
11.67	277	0.0	0	0.00	
12.13	1370	2.9	57	0.57	1,1-DCE
12.42	250	0.0	0	0.00	
13.57	635	0.0	0	0.00	
14.98	585639	32.9	657	6.57	METH CHLORIDE
15.98	1293	0.0	0	0.00	
16.49	877	0.0	0	0.00	
16.66	1233	4.2	84	0.84	TRANS 1,2-DCE
17.29	279	0.0	0	0.00	
18.23	550	0.0	0	0.00	
18.59	639	0.0	0	0.00	
18.75	308	0.0	0	0.00	
19.86	545	0.0	0	0.00	
21.95	378	0.0	0	0.00	
23.59	476	0.0	0	0.00	
23.83	647	0.0	0	0.00	
25.73	4605	2.0	40	0.40	CHLOROFORM
27.98	6299	3.9	78	0.78	1,1,1-TCA
30.29	909	0.0	0	0.00	
30.81	523	0.0	0	0.00	
31.68	11143	0.0	0	0.00	
33.70	3499	2.3	47	0.47	TCE
34.71	3389	0.5	10	0.10	1,2-DCPA
35.98	562	5.6	111	1.11	DIBROMOMETHANE
36.84	950	0.0	0	0.00	
38.53	824	4.4	88	0.88	CIS 1,3-DCPE
38.80	535	0.0	0	0.00	
38.98	488	0.0	0	0.00	
40.33	312	0.0	0	0.00	
40.58	313	0.0	0	0.00	
40.82	426	4.6	91	0.91	TRANS 1,3-DCPE
42.58	4753	1.4	28	0.28	1,3 DCPA/PCE
45.25	436	0.0	0	0.00	
45.67	409459	567.6	11353	113.53	1CL4FBZ (SURR)
46.46	5271	0.0	1	0.01	1,1,1,2-PCA

Continued...

File : c:\ezchrom\data\160603.16
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : MTHD BLKw 16
 Acquired : Jun 04, 1996 09:38:21
 Printed : Jun 05, 1996 09:09:28

Channel B Results

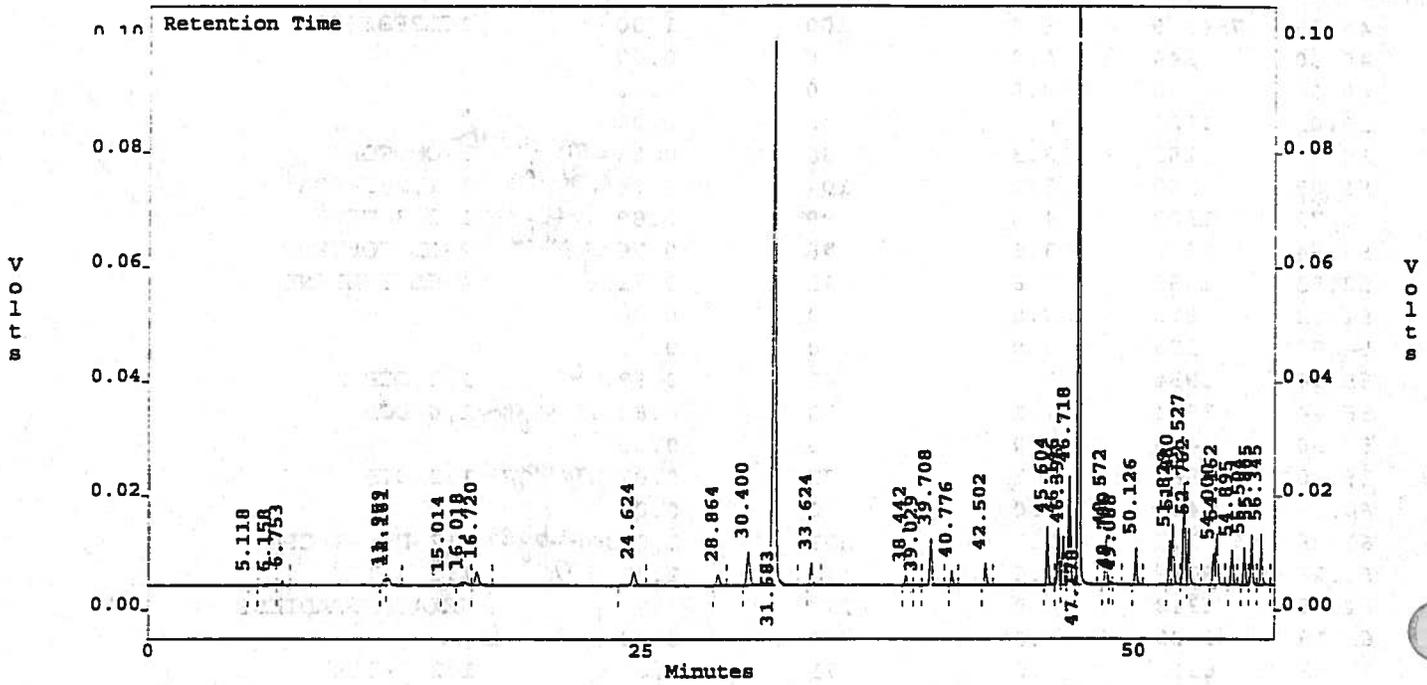
RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
47.25	754369	5.0	100	1.00	1CL2FBZ (IS)
49.30	544	0.0	0	0.00	
49.64	750	0.0	0	0.00	
50.01	1029	0.0	0	0.00	
50.31	283	3.3	66	0.66	← MALbyAR BROMOFORM
51.09	952	5.2	104	1.04	← MALbyAR 1,1,2,2-PCA
51.73	1500	4.5	89	0.89	← MALbyAR 1,2,3-TCPA
52.64	1761	3.8	76	0.76	← MALbyAR 2-CL TOLUENE
52.83	1385	3.6	71	0.71	↓ 4-CL TOLUENE
54.02	878	0.0	0	0.00	
54.70	293	0.0	0	0.00	
55.96	3954	3.1	62	0.62	NC 1,3-DCB
56.44	3934	4.1	83	0.83	← MALbyAR 1,4-DCB
57.50	448	0.0	0	0.00	
58.00	4681	4.1	82	0.82	← MALbyAR 1,2-DCB
60.03	465	0.0	0	0.00	
61.06	315	10.2	203	2.03	← MALbyAR 1,2-DBr-3-CPA
64.28	9736	6.6	132	1.32	NM 1,2,4-TCB
64.68	45348	8.9	177	1.77	↓ HEXACL BUTADIENE
65.19	1729	0.0	0	0.00	
65.83	8519	3.6	71	0.71	↓ 1,2,3-TCB
66.63	321	0.0	0	0.00	

UI 05 Jun 96

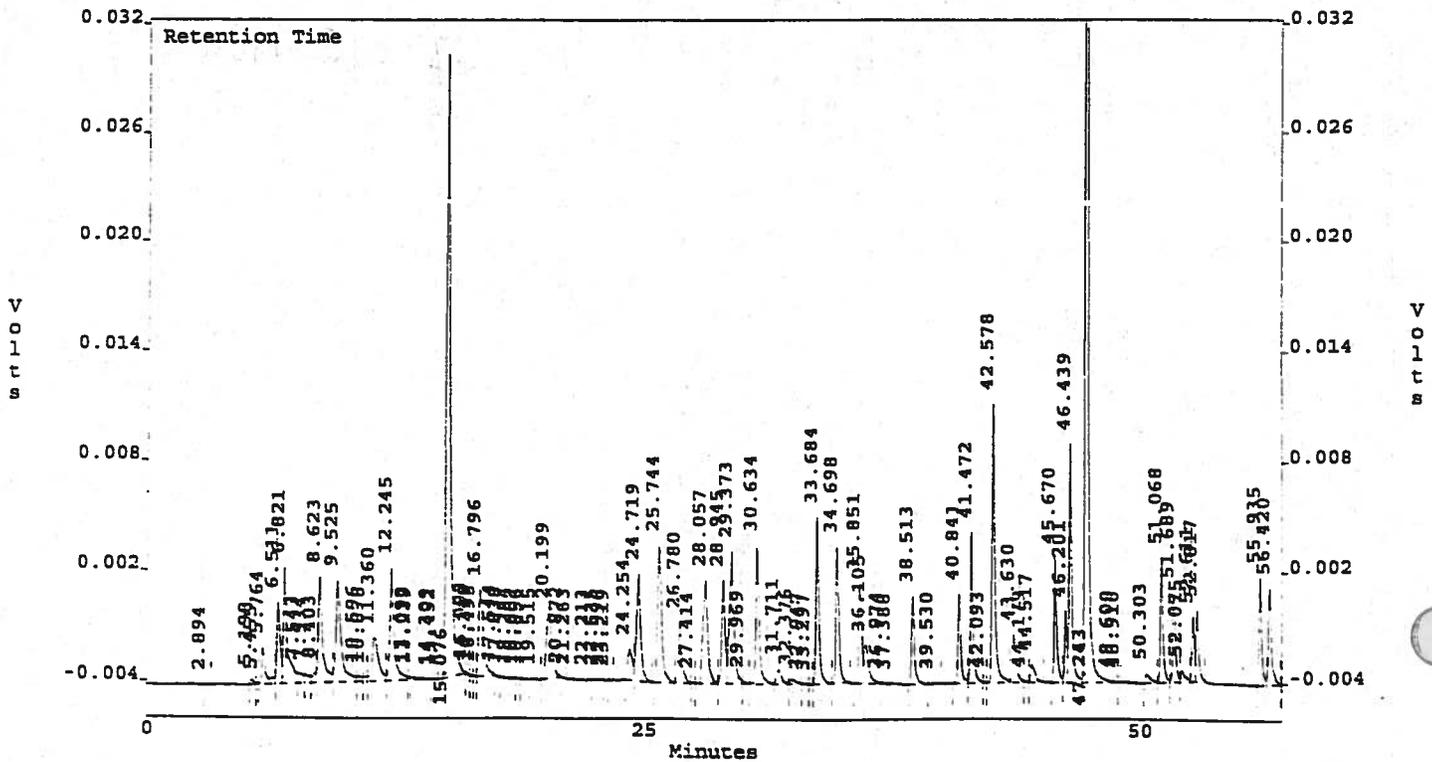
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.17
Method : c:\ezchrom\methods\lvoa0603.met
Sample ID : 2.0 ppb 1
Acquired : Jun 04, 1996 11:08:55
Printed : Jun 05, 1996 09:09:52

c:\ezchrom\data\160603.17 -- Channel A



c:\ezchrom\data\160603.17 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.17
Method : c:\ezchrom\methods\lvoa0603.met
Sample ID : 2.0 ppb 1
Acquired : Jun 04, 1996 11:08:55
Printed : Jun 05, 1996 09:09:59

Channel A Results

Table with 6 columns: RT(min), Pk Area, Air(ng), Soil(µg/kg), Soln(µg/L), Compound. Contains 40 rows of data with handwritten annotations like 'ok-H' and '94/'.

McKenzie Laboratories - EPA GC Volatiles
 File : c:\ezchrom\data1\160603.17
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 2.0 ppb 1
 Acquired : Jun 04, 1996 11:08:55
 Printed : Jun 05, 1996 09:09:59

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
2.89	688	0.0	0	0.00	
5.20	2740	0.0	0	0.00	
5.45	446	0.0	0	0.00	
5.76	27843	8.1	163	1.63	DCDFM
6.51	50915	10.1	201	2.01	CHLOROMETHANE
6.82	87107	10.6	212	2.12	VINYL CHLORIDE
7.54	11817	0.0	0	0.00	
7.93	7833	0.0	0	0.00	
8.40	7025	11.5	231	2.31	BROMOMETHANE
8.62	84943	11.7	233	2.33	CHLOROETHANE
9.52	100361	10.7	215	2.15	TCFM
10.60	5244	0.0	0	0.00	
10.88	3104	0.0	0	0.00	
11.36	57523	11.0	220	2.20	FREON 113
12.25	89877	10.2	205	2.05	1,1-DCE
13.09	1147	0.0	0	0.00	
13.24	3432	0.0	0	0.00	
14.31	277	0.0	0	0.00	
14.45	211	0.0	0	0.00	
15.08	521793	23.8	476	4.76 *	METH CHLORIDE
16.09	901	0.0	0	0.00	
16.32	292	0.0	0	0.00	
16.50	311	0.0	0	0.00	
16.80	75891	10.7	214	2.14	TRANS 1,2-DCE
17.54	654	0.0	0	0.00	
17.84	467	0.0	0	0.00	
18.28	787	0.0	0	0.00	
18.66	433	0.0	0	0.00	
18.86	532	0.0	0	0.00	
19.52	1506	0.0	0	0.00	
20.20	69099	11.7	235	2.35	1,1-DCA
20.87	464	0.0	0	0.00	
21.26	528	0.0	0	0.00	
22.21	366	0.0	0	0.00	
22.64	1584	0.0	0	0.00	
23.00	411	0.0	0	0.00	
23.22	659	0.0	0	0.00	
24.25	28270	8.0	160	1.60	2,2-DCPA
24.72	85463	8.9	179	1.79	CIS 1,2-DCE
25.74	110122	10.1	203	2.03	CHLOROFORM
26.78	43265	11.7	234	2.34	BCM
27.41	636	0.0	0	0.00	
28.06	96026	11.0	221	2.21	1,1,1-TCA
28.95	67269	9.2	183	1.83	1,1-DCPE
29.37	112519	10.1	201	2.01	CARBON TET

Continued...

File : c:\ezchrom\data1\160603.17
Method : c:\ezchrom\methods\lvoa0603.met
Sample ID : 2.0 ppb 1
Acquired : Jun 04, 1996 11:08:55
Printed : Jun 05, 1996 09:09:59

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
29.97	1926	0.0	0	0.00	
30.63	87132	11.0	220	2.20	1,2-DCA
31.71	13817	0.0	0	0.00	
32.38	6944	8.8	175	1.75	2-CL ETH VI ETH
32.95	1510	0.0	0	0.00	
33.30	256	0.0	0	0.00	
33.68	101932	9.9	199	1.99	TCE
34.70	78378	8.1	162	1.62	1,2-DCPA
35.85	54946	9.4	189	1.89	BRDI CLMETHANE
36.11	36322	10.7	215	2.15	DIBROMOMETHANE
36.97	1855	0.0	0	0.00	
37.39	271	0.0	0	0.00	
38.51	48993	10.3	206	2.06	CIS 1,3-DCPE
39.53	1933	0.0	0	0.00	
40.84	46839	10.9	218	2.18	TRANS 1,3-DCPE
41.47	79822	11.0	220	2.20	1,1,2-TCA
42.09	667	0.0	0	0.00	
42.58	161725	16.5	330	3.30	1,3 DCPA/PCE
43.63	30411	10.5	209	2.09	DIBRCLMETHANE
44.18	985	0.0	0	0.00	
44.52	14827	9.6	193	1.93	1,2-DBEA (EDB)
45.67	63521	114.4	2288	22.88	1CL4FBZ (SURR) 114 /
46.20	30459	11.0	219	2.19	CHLORO BENZENE
46.44	129602	10.2	203	2.03	1,1,1,2-PCA
47.24	834003	5.0	100	1.00	1CL2FBZ (IS)
48.60	1100	0.0	0	0.00	
48.91	268	0.0	0	0.00	
50.30	9084	6.9	139	1.39*	BROMOFORM
51.07	63666	13.9	278	2.78 *	1,1,2,2-PCA
51.69	46089	11.8	237	2.37	1,2,3-TCPA
52.07	9453	8.4	169	1.69	BROMO BENZENE
52.61	28488	9.9	199	1.99	2-CL TOLUENE
52.82	37172	10.1	202	2.02	4-CL TOLUENE
55.94	50823	9.7	195	1.95	1,3-DCB
56.42	55098	10.7	215	2.15	1,4-DCB
57.02	1787	0.0	0	0.00	
57.40	528	0.0	0	0.00	
57.52	250	0.0	0	0.00	
57.97	44758	9.9	198	1.98	1,2-DCB
59.13	1180	0.0	0	0.00	
59.57	903	0.0	0	0.00	
60.77	464	0.0	0	0.00	
61.32	2633	11.8	237	2.37	1,2-DBr-3-CPA
61.44	407	0.0	0	0.00	
61.51	928	0.0	0	0.00	
63.26	991	0.0	0	0.00	
63.63	497	0.0	0	0.00	

continued...

File : c:\ezchrom\data\160603.17
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 2.0 ppb 1
 Acquired : Jun 04, 1996 11:08:55
 Printed : Jun 05, 1996 09:09:59

Channel B Results

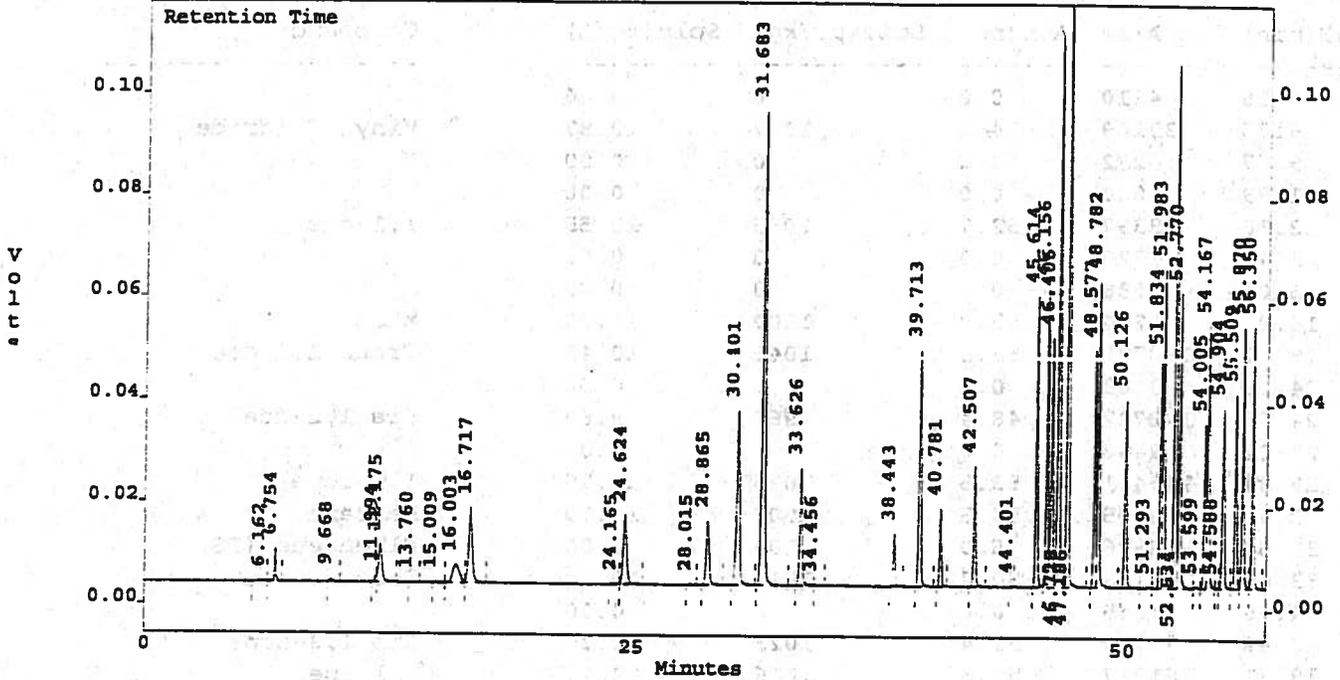
RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
64.22	44549	11.9	237	2.37	1,2,4-TCB
64.64	86078	13.2	264	2.64 *	HEXACL BUTADIENE
65.21	1157	0.0	0	0.00	
65.36	488	0.0	0	0.00	
65.48	686	0.0	0	0.00	
65.80	41145	10.3	206	2.06	1,2,3-TCB

* out of ± 20% criteria,
 no 502.2 water samples
 run this day.
 UI 05 Jun 96

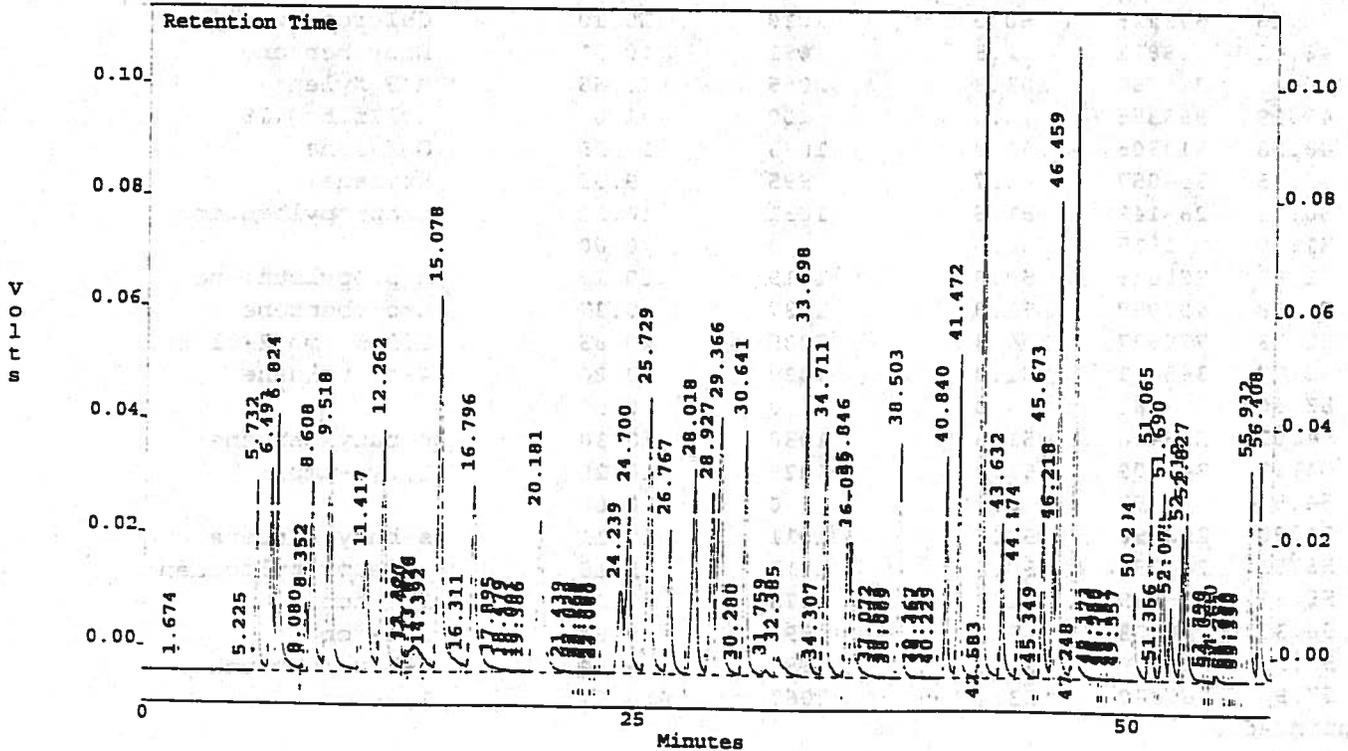
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.18
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : CHK VOA 2
 Acquired : Jun 04, 1996 12:37:22
 Printed : Jun 05, 1996 09:10:24

c:\ezchrom\data\160603.18 -- Channel A



c:\ezchrom\data\160603.18 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.18
 Method : c:\ezchrom\methods\ivoa0503.met
 Sample ID : CHK VOA 2
 Acquired : Jun 04, 1996 12:37:22
 Printed : Jun 05, 1996 09:10:31

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
6.16	4310	0.0	0	0.00	
6.75	37209	54.4	1087	10.87	Vinyl Chloride
9.67	6272	0.0	0	0.00	
11.99	8860	0.0	0	0.00	
12.18	93397	52.7	1055	10.55	1,1-dce
13.76	1720	0.0	0	0.00	
15.01	3086	0.0	0	0.00	
16.00	82204	55.0	1100	11.00	Mtbe
16.72	190776	52.1	1041	10.41	Trans 1,2-dce
24.16	3003	0.0	0	0.00	
24.62	172732	48.4	969	9.69	Cis 1,2-dce
28.02	2448	0.0	0	0.00	
28.87	145431	53.8	1075	10.75	1,1-dcpe
30.40	382395	50.5	1009	10.09	Benzene
31.68	956506	5.0	100	1.00	Flbenzene (IS)
33.63	207156	50.7	1014	10.14	Tce
34.46	1655	0.0	0	0.00	
38.44	75090	51.4	1028	10.28	Cis 1,3-dcpe
39.71	361917	50.8	1016	10.16	Toluene
40.78	98108	50.8	1016	10.16	Trans 1,3-dcpe
42.51	174336	51.3	1026	10.26	Pce
44.40	1845	0.0	0	0.00	
45.61	363809	495.2	9903	99.03	1cl4fbz (surr) 99.0/
46.16	373245	50.5	1010	10.10	Chlorobenzene
46.41	338821	52.5	1051	10.51	Ethylbenzene
46.73	760760	103.3	2065	20.65	M/P Xylene
47.19	963355	5.0	100	1.00	1cl2flbz (IS)
48.58	313305	51.2	1025	10.25	O Xylene
48.78	394057	49.7	995	9.95	Styrene
50.13	266149	51.5	1031	10.31	Isopropylbenzene
51.29	1815	0.0	0	0.00	
51.83	285639	50.9	1019	10.19	n-propylbenzene
51.98	407080	51.9	1037	10.37	Bromobenzene
52.53	777577	104.3	2085	20.85	1,3,5-tmb/2-cl tol
52.77	365091	51.0	1020	10.20	4-cl toluene
53.60	2884	0.0	0	0.00	
54.01	228446	51.5	1030	10.30	t-butylbenzene
54.17	346509	51.2	1025	10.25	1,2,4-tmb
54.59	2153	0.0	0	0.00	
54.90	252250	50.6	1011	10.11	s-butylbenzene
55.51	254051	50.8	1015	10.15	p-isopropyltoluene
55.87	316889	51.2	1023	10.23	1,3-dcb
56.35	308103	49.8	997	9.97	1,4-dcb
57.25	263208	49.7	994	9.94	n-butylbenzene
57.90	267370	53.4	1067	10.67	1,2-dcb

Continued...

File : c:\ezchrom\data\160603.18
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : CHK VOA 2
 Acquired : Jun 04, 1996 12:37:22
 Printed : Jun 05, 1996 09:10:31

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
60.17	1402	0.0	0	0.00	
64.17	174763	54.8	1096	10.96	1,2,4-tcb
64.59	138588	57.4	1148	11.48	Hexachlorobutadiene
64.99	236465	58.3	1166	11.66*	Napthalene
65.73	168871	59.2	1183	11.830 ^{k-H}	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.18
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : CHK VOA 2
 Acquired : Jun 04, 1996 12:37:22
 Printed : Jun 05, 1996 09:10:31

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
1.67	299	0.0	0	0.00	
5.22	1366	0.0	0	0.00	
5.73	326452	48.3	965	9.65	DCDFM
6.49	377276	45.5	910	9.10	CHLOROMETHANE
6.82	522472	51.4	1028	10.28	VINYL CHLORIDE
8.08	3489	0.0	0	0.00	
8.35	116709	50.9	1018	10.18	BROMOMETHANE
8.61	504483	50.2	1003	10.03	CHLOROETHANE
9.52	665307	50.5	1009	10.09	TCFM
11.42	430966	47.5	950	9.50	FREON 113
12.26	658128	51.4	1028	10.28	1,1-DCE
13.33	28010	0.0	0	0.00	
13.48	19859	0.0	0	0.00	
13.83	69378	0.0	0	0.00	
13.93	102812	0.0	0	0.00	
14.33	52076	0.0	0	0.00	
15.08	1083724	55.3	1106	11.06	METH CHLORIDE
16.31	21258	0.0	0	0.00	
16.80	591484	49.9	998	9.98	TRANS 1,2-DCE
17.89	22333	0.0	0	0.00	
18.48	7158	0.0	0	0.00	
19.09	6213	0.0	0	0.00	
19.39	3786	0.0	0	0.00	
20.18	569271	48.9	978	9.78	1,1-DCA
21.44	7080	0.0	0	0.00	
22.03	2608	0.0	0	0.00	
22.26	1397	0.0	0	0.00	
22.51	1838	0.0	0	0.00	
22.89	823	0.0	0	0.00	
23.06	809	0.0	0	0.00	
24.24	269054	47.2	943	9.43	2,2-DCPA
24.70	507183	43.7	875	8.75	CIS 1,2-DCE
25.73	724242	51.2	1024	10.24	CHLOROFORM
26.77	343430	47.3	946	9.46	BCM
28.02	608454	46.3	927	9.27	1,1,1-TCA
28.93	421905	49.1	982	9.82	1,1-DCPE
29.37	776270	51.9	1038	10.38	CARBON TET
30.28	3172	0.0	0	0.00	
30.64	515461	45.9	918	9.18	1,2-DCA
31.76	20294	0.0	0	0.00	
32.38	90967	43.3	867	8.67	2-CL ETH VI ETH
33.70	658624	47.2	943	9.43	TCE
34.31	8637	0.0	0	0.00	
34.71	517144	46.7	935	9.35	1,2-DCPA
35.85	371908	44.1	882	8.82	BRDICLMETHANE

Continued

File : c:\ezchrom\data1\160603.18
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : CHK VOA 2
 Acquired : Jun 04, 1996 12:37:22
 Printed : Jun 05, 1996 09:10:31

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
36.06	321177	46.6	932	9.32	DIBROMOMETHANE
37.07	9161	0.0	0	0.00	
37.57	1955	0.0	0	0.00	
37.83	1385	0.0	0	0.00	
38.01	861	0.0	0	0.00	
38.50	402690	48.1	962	9.62	CIS 1,3-DCPE
39.37	4160	0.0	0	0.00	
39.75	1614	0.0	0	0.00	
40.23	786	0.0	0	0.00	
40.84	331892	44.8	896	8.96	TRANS 1,3-DCPE
41.47	509845	48.4	967	9.67	1,1,2-TCA
42.58	1201292	103.4	2068	20.68	1,3 DCPA/PCE
43.63	277050	43.1	861	8.61	DIBROMOMETHANE
44.47	194515	48.9	978	9.78	1,2-DBEA (EDB)
45.35	3949	0.0	0	0.00	
45.67	359585	411.1	8222	82.22	1CL4FBZ (SURR) 82.1
46.22	201388	44.6	893	8.93	CHLOROBENZENE
46.46	808418	58.1	1163	11.63 *	1,1,1,2-PCA
47.25	942307	5.0	100	1.00	1CL2FBZ (IS)
48.17	7105	0.0	0	0.00	
48.59	1800	0.0	0	0.00	
48.74	1898	0.0	0	0.00	
49.15	1922	0.0	0	0.00	
49.56	392	0.0	0	0.00	
50.29	151135	56.1	1122	11.22	BROMOFORM
51.06	343341	47.3	947	9.47	1,1,2,2-PCA
51.36	8177	0.0	0	0.00	
51.69	279250	45.2	905	9.05	1,2,3-TCPA
52.07	140732	44.4	888	8.88	BROMOBENZENE
52.51	127404	43.7	875	8.75	2-CL TOLUENE
52.83	294547	51.3	1026	10.26	4-CL TOLUENE
53.79	3031	0.0	0	0.00	
54.02	3276	0.0	0	0.00	
54.33	17189	0.0	0	0.00	
54.75	2238	0.0	0	0.00	
55.04	1172	0.0	0	0.00	
55.18	776	0.0	0	0.00	
55.34	916	0.0	0	0.00	
55.93	309794	41.7	834	8.34 *	1,3-DCB
56.41	360832	45.0	900	9.00	1,4-DCB
57.53	1184	0.0	0	0.00	
57.96	334452	46.9	938	9.38	1,2-DCB
58.80	4401	0.0	0	0.00	
59.61	616	0.0	0	0.00	
60.02	623	0.0	0	0.00	
60.79	878	0.0	0	0.00	
61.28	45631	39.3	786	7.86 *	1,2-DBr-3-CPA

Continued...

File : c:\ezchrom\data\160603.18
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : CHK VOA 2
 Acquired : Jun 04, 1996 12:37:22
 Printed : Jun 05, 1996 09:10:31

Channel B Results

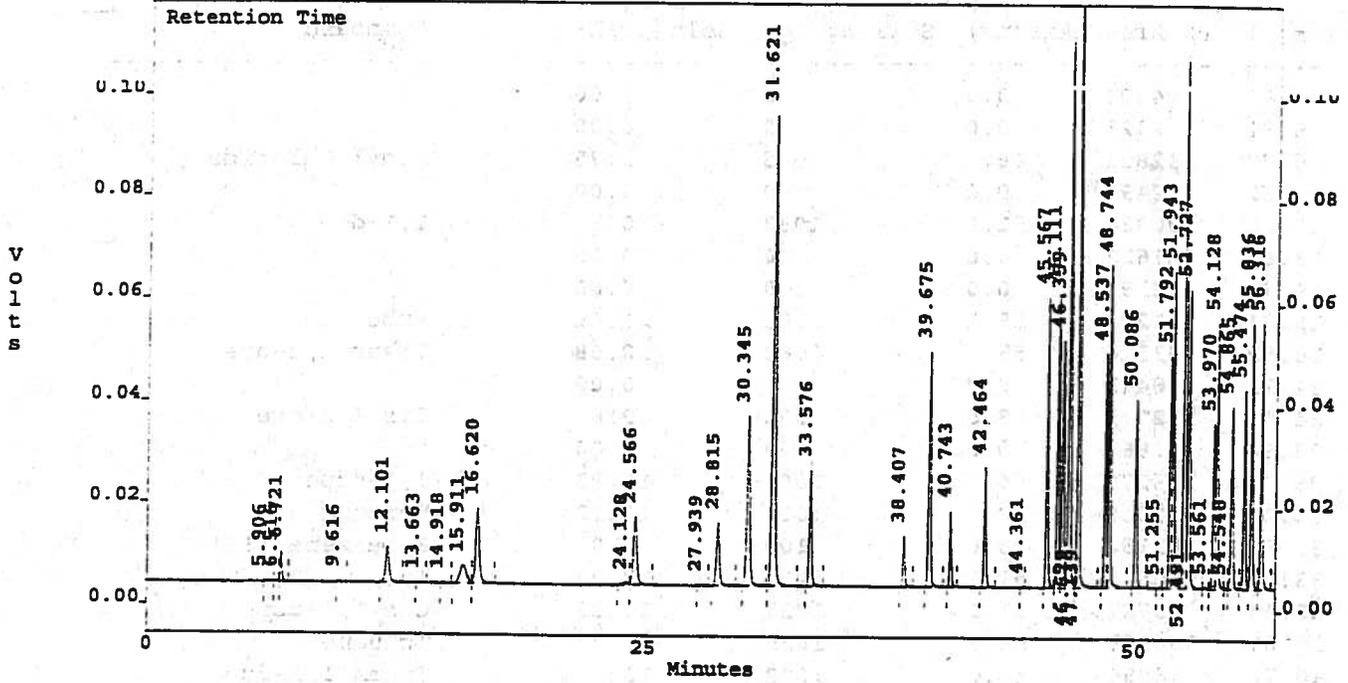
RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
62.50	2544	0.0	0	0.00	
63.00	1769	0.0	0	0.00	
63.18	551	0.0	0	0.00	
63.40	651	0.0	0	0.00	
63.63	386	0.0	0	0.00	
64.23	289876	44.8	896	8.96	1,2,4-TCB
64.66	489031	55.0	1099	10.99	HEXACHLOROCYCLOHEPTADIENE
65.54	1215	0.0	0	0.00	
65.79	288420	55.9	1118	11.18	1,2,3-TCB

* OK in CTL VOA
 UI 05 Jun 96
 AB006 Jun 96

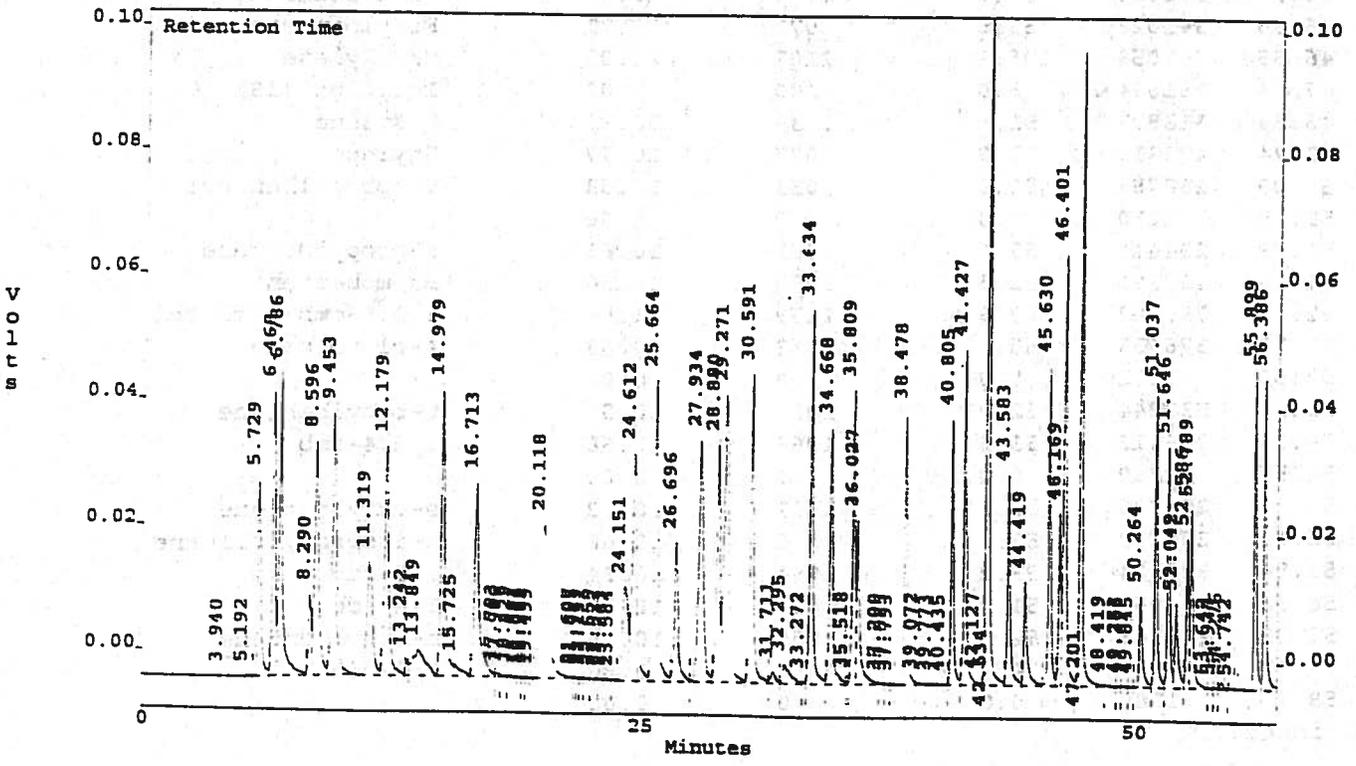
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data\160603.21
Method : c:\ezchrom\methods\lvoa0603.met
Sample ID : CTL VOA 5
Acquired : Jun 04, 1996 17:02:46
Printed : Jun 05, 1996 09:12:04

c:\ezchrom\data\160603.21 -- Channel A



c:\ezchrom\data\160603.21 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.21
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : CTL VOA 5
 Acquired : Jun 04, 1996 17:02:46
 Printed : Jun 05, 1996 09:12:10

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln (µg/L)	Compound
5.91	4094	0.0	0	0.00	
6.52	2323	0.0	0	0.00	
6.72	32801	48.7	975	9.75	Vinyl Chloride
9.62	2497	0.0	0	0.00	
12.10	90884	51.9	1038	10.38	1,1-dce
13.66	1622	0.0	0	0.00	
14.92	2195	0.0	0	0.00	
15.91	81299	55.1	1101	11.01	Mtbe
16.62	193516	53.4	1068	10.68	Trans 1,2-dce
24.13	8445	0.0	0	0.00	
24.57	172775	49.0	980	9.80	Cis 1,2-dce
27.94	2869	0.0	0	0.00	
28.82	146179	54.7	1093	10.93	1,1-dcpe
30.34	370000	50.0	1012	10.12	Benzene
31.62	951552	5.0	100	1.00	Flbenzene (IS)
33.58	206528	51.1	1023	10.23	Tce
38.41	73727	51.1	1022	10.22	Cis 1,3-dcpe
39.67	360995	51.3	1025	10.25	Toluene
40.74	96094	50.4	1008	10.08	Trans 1,3-dcpe
42.46	176197	52.4	1048	10.48	Pce
44.36	1883	0.0	0	0.00	
45.57	366301	504.4	10089	100.89	1cl4fbz (surr) 101. /
46.11	374724	51.3	1026	10.26	Chlorobenzene
46.36	341029	53.5	1071	10.71	Ethylbenzene
46.68	767059	105.3	2107	21.07	M/P Xylene
47.14	951844 ✓	5.0	100	1.00	1cl2flbz (IS)
48.54	313893	51.9	1039	10.39	O Xylene
48.74	423319	53.9	1077	10.77	Styrene
50.09	268787	52.6	1053	10.53	Isopropylbenzene
51.25	1210	0.0	0	0.00	
51.79	294449	53.0	1061	10.61	n-propylbenzene
51.94	407390	52.5	1050	10.50	Bromobenzene
52.49	796207	107.9	2159	21.59	1,3,5-tmb/2-cl tol
52.73	376433	53.1	1063	10.63	4-cl toluene
53.56	2582	0.0	0	0.00	
53.97	232244	52.9	1058	10.58	t-butylbenzene
54.13	356412	53.3	1066	10.66	1,2,4-tmb
54.55	2359	0.0	0	0.00	
54.87	259786	52.6	1052	10.52	s-butylbenzene
55.47	264119	53.3	1066	10.66	p-isopropyltoluene
55.84	325584	53.2	1064	10.64	1,3-dcb
56.32	316960	51.9	1037	10.37	1,4-dcb
57.22	276763	52.8	1055	10.55	n-butylbenzene
57.87	268912	54.3	1086	10.86	1.2-dcb
59.17	1288	0.0	0	0.00	

Continued...

File : c:\ezchrom\data1\160603.21
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : CTL VOA 5
 Acquired : Jun 04, 1996 17:02:46
 Printed : Jun 05, 1996 09:12:10

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln (µg/L)	Compound
60.16	1790	0.0	0	0.00	
63.33	1602	0.0	0	0.00	
64.16	157816	50.3	1006	10.06	1,2,4-tcb
64.58	122058	51.2	1023	10.23	Hexachlorobutadiene
64.98	209727	52.5	1051	10.51	Napthalene
65.73	132251	46.9	939	9.39	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.21
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : CTL VOA 5
 Acquired : Jun 04, 1996 17:02:46
 Printed : Jun 05, 1996 09:12:11

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
3.94	645	0.0	0	0.00	
5.19	2006	0.0	0	0.00	
5.73	343413	54.3	1086	10.86	DCDFM
6.47	477664	60.8	1217	12.17 *	CHLOROMETHANE
6.79	573379	60.7	1214	12.14 *	VINYL CHLORIDE
8.29	116414	54.1	1081	10.81	BROMOMETHANE
8.60	545674	58.1	1163	11.63 *	CHLOROETHANE
9.45	629158	51.5	1029	10.29	TCFM
11.32	380376	45.5	909	9.09	FREON 113
12.18	570850	48.3	966	9.66	1,1-DCE
13.24	20753	0.0	0	0.00	
13.85	183657	0.0	0	0.00	
14.98	680677	33.1	661	6.61 *	METH CHLORIDE
15.72	43664	0.0	0	0.00	
16.71	519875	47.6	952	9.52	TRANS 1,2-DCE
17.78	5812	0.0	0	0.00	
17.99	2727	0.0	0	0.00	
18.43	3477	0.0	0	0.00	
18.89	834	0.0	0	0.00	
19.07	440	0.0	0	0.00	
19.21	624	0.0	0	0.00	
19.50	605	0.0	0	0.00	
20.12	569827	52.4	1048	10.48	1,1-DCA
21.61	378	0.0	0	0.00	
21.78	522	0.0	0	0.00	
21.96	502	0.0	0	0.00	
22.15	870	0.0	0	0.00	
22.66	1326	0.0	0	0.00	
22.92	604	0.0	0	0.00	
23.24	1118	0.0	0	0.00	
23.58	1681	0.0	0	0.00	
24.15	295130	55.0	1100	11.00	2,2-DCPA
24.61	581442	53.7	1074	10.74	CIS 1,2-DCE
25.66	712952	54.3	1086	10.86	CHLOROFORM
26.70	321117	47.7	954	9.54	BCM
27.93	656003	53.4	1068	10.68	1,1,1-TCA
28.88	454048	57.0	1140	11.40	1,1-DCPE
29.27	808666	58.1	1162	11.62 *	CARBON TET
30.59	566392	54.0	1079	10.79	1,2-DCA
31.71	32642	0.0	0	0.00	
32.29	85378	43.8	877	8.77	2-CL ETH VI ETH
33.27	3720	0.0	0	0.00	
33.63	631153	48.7	974	9.74	TCE
34.67	495188	48.3	966	9.66	1,2-DCPA
35.52	3213	0.0	0	0.00	

Continued...

File : c:\ezchrom\data\150503.21
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : CTL VOA 5
 Acquired : Jun 04, 1996 17:02:46
 Printed : Jun 05, 1996 09:12:11

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
35.81	428750	54.3	1085	10.85	BRD1CLMETHANE
36.03	308120	48.1	961	9.61	DIBROMOMETHANE
37.20	3014	0.0	0	0.00	
37.52	2661	0.0	0	0.00	
37.79	1249	0.0	0	0.00	
38.48	390545	50.2	1004	10.04	CIS 1,3-DCPE
39.07	6627	0.0	0	0.00	
39.77	3058	0.0	0	0.00	
40.44	1591	0.0	0	0.00	
40.80	362554	52.1	1041	10.41	TRANS 1,3-DCPE
41.43	497252	50.8	1015	10.15	1,1,2-TCA
42.13	5775	0.0	0	0.00	
42.53	1117172	103.8	2077	20.77	1,3 DCPA/PCE
43.58	335838	54.5	1091	10.91	DIBRCLMETHANE
44.42	200188	53.7	1073	10.73	1,2-DBEA (EDB)
45.63	420423	508.3	10166	101.66	1CL4FBZ (SURR) 102/
46.17	216992	51.3	1025	10.25	CHLORO BENZENE
46.40	709606	55.1	1102	11.02	1,1,1,2-PCA
47.20	872817 ✓	5.0	100	1.00	1CL2FBZ (IS)
48.42	5143	0.0	0	0.00	
49.25	1525	0.0	0	0.00	
49.37	1683	0.0	0	0.00	
49.85	813	0.0	0	0.00	
50.26	159366	63.0	1260	12.60 *	BROMOFORM
51.04	398175	58.0	1160	11.60 *	1,1,2,2-PCA
51.65	325479	55.8	1117	11.17	1,2,3-TCPA
52.04	153484	51.3	1026	10.26	BROMO BENZENE
52.59	189725	45.3	905	9.05	2-CL TOLUENE
52.79	265966	50.1	1002	10.02	4-CL TOLUENE
53.64	2402	0.0	0	0.00	
53.93	1700	0.0	0	0.00	
54.28	12625	0.0	0	0.00	
54.74	1714	0.0	0	0.00	
55.90	394642	56.4	1128	11.28	1,3-DCB
56.39	417278	55.3	1106	11.06	1,4-DCB
57.31	4145	0.0	0	0.00	
57.63	1041	0.0	0	0.00	
57.94	337439	50.8	1015	10.15	1,2-DCB
58.75	3645	0.0	0	0.00	
59.02	2275	0.0	0	0.00	
59.31	1426	0.0	0	0.00	
59.46	1918	0.0	0	0.00	
60.29	3942	0.0	0	0.00	
60.48	1437	0.0	0	0.00	
60.83	1297	0.0	0	0.00	
61.01	265	0.0	0	0.00	
61.26	47335	42.8	856	8.56	1,2-DBr-3-CPA

continued...

File : c:\ezchrom\data\160603.21
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : CTL VOA 5
 Acquired : Jun 04, 1996 17:02:46
 Printed : Jun 05, 1996 09:12:11

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln(µg/l)	Compound
62.16	1379	0.0	0	0.00	
62.54	2027	0.0	0	0.00	
63.11	1615	0.0	0	0.00	
63.43	2496	0.0	0	0.00	
63.96	4219	0.0	0	0.00	
64.22	308849	50.8	1016	10.16	1,2,4-TCB
64.64	435316	52.9	1059	10.59	HEXACHLOROCYCLOHEPTADIENE
65.28	12500	0.0	0	0.00	
65.78	228545	48.1	961	9.61	1,2,3-TCB
66.60	10659	0.0	0	0.00	

* OK in CHK VOA
 UI as Jun 96
 4606 Jun 96

Volatiles Instrument 1 Run Log

CTL STD V0AP 0523-3 10.0ug/ml
 CHK STD V0AS 0523-3
 Mtx Spk CTL STD
 INT STD IS 0523-07 40.0ug/ml
 EXT SURR ESW 0523-05 20.0ug/ml

Analyst CT/TOF Date 05 Jun 96
 Printed mm/UT Date 07 Jun 96
 Onto Network _____ Date _____
 Method Used 1 V0A0603.m
 Batch Used 0605=1

Data File Number	SP#	Sample ID	Aliquot	Client ID	Method	Comments	Hnu	pH
16060501	1	CTL V0A	5.0ul		All	✓ AB 14 Jun 96		
02	2	MT40 BLKw	5.0ml			✓ 1122-PCA PK SHP, CB, 1, DCE, TCFM PK SHP, 2, 2 DCPA/15 12 DCE 1, 1, 2, 2 PCA PK SHP DCM control.		
03	3	MT40 BLKa	50.0ml			✓ AB 14 Jun 96		
04	4	4891R & S	1.0ml	BB-03006 final/ctf	THM'S	✓ AB 17 Jun 96		
05	5	4894R x 10	0.5ml	# 9	u01/002	✓ AB 14 Jun 96		
06	6	5262a	50.0ml	AIR-2-1-93	air 502.2(LS)	✓		
5252-67 (160)	7	Blk Spkaw	5.0ml		All	✓		
08	8	Blk Spk Dupaw				✓		
09	9	5263a	50.0ml	AIR-1-2-93	air 502.2(LS)	✓		
10	10	5264a		AIR-1-8-93		✓		
11	11	5265a		AIR-1-7-93		✓		
12	12	5266a		AIR-1-6-93		III TRAP SHP ✓		
13	13	5267a		AIR-1-1-93		III TRAP SHP ✓		
14	14	5040s	50.0ul		m=OH 5016/5020	TCFM, 110CA 07 Jun 96 being processed against.		
15	15	5050s				R@X1 ASRT shifted		
16	16	5051s				1 V0A0606.MEJ ↓		0
17	1	CHK V0A	5.0ul		All	✓ AB 14 Jun 96		

05 Jun 96

INTERNAL STANDARD WORKSHEET

METHOD: All Volatiles
DATE: 05 Jun 96

INSTRUMENT: 1
OPERATOR: TDF/KK/VT/CT/TH

STANDARD CONC. (ppb)	PID DETECTOR FLUOROBENZENE	PID DETECTOR 1-CHLORO-2-FLUOROBENZENE	HALL (ELCD) DETECTOR 1-CHLORO-2-FLUOROBENZENE
	RESPONSE AREA	RESPONSE AREA	RESPONSE AREA
<u>0.4</u>	<u>1007246</u>	<u>974801</u>	<u>700752</u>
<u>0.5</u>	<u>1013472</u>	<u>900664</u>	<u>578365</u>
<u>1.0</u>	<u>995578</u>	<u>973729</u>	<u>719552</u>
<u>5.0</u>	<u>1002620</u>	<u>988076</u>	<u>833755</u>
<u>10.0</u>	<u>982987</u>	<u>969072</u>	<u>913170</u>
<u>25.0</u>	<u>1015904</u>	<u>1026493</u>	<u>927730</u>
<u>50.0</u>	<u>985701</u>	<u>1073223</u>	<u>898157</u>
MEAN	<u>1000501</u>	<u>986580</u>	<u>795926</u>
UPPER LIMIT (130%)	<u>1300651</u>	<u>1282554</u>	<u>1034704</u>
LOWER LIMIT (70%)	<u>700351</u>	<u>690606</u>	<u>557148</u>
Std. Dev.	<u>N/A</u>	<u>49417</u>	<u>122605</u>
+ 3 Std. Dev.	<u>N/A</u>	<u>1134831</u>	<u>1163741</u>
- 3 Std. Dev.	<u>N/A</u>	<u>838329</u>	<u>428111</u>

Comments:

Initials TDF Date 05 Jun 96

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.09
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:23

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
6.50	2150	0.0	0	0.00	
6.71	1699	0.0	0	0.50	Vinyl Chloride
11.89	4730	0.0	0	0.00	
12.09	3092	0.0	0	0.50	1,1-dce
15.99	2242	0.0	0	0.50	Mtbe
16.67	7678	0.0	0	0.50	Trans 1,2-dce
24.61	6207	0.0	0	0.50	Cis 1,2-dce
28.84	4620	0.0	0	0.50	1,1-dcpe
30.38	14170	0.0	0	0.50	Benzene
31.66	1013472	0.0	0	1.00	Flbenzene (IS)
33.30	1308	0.0	0	0.00	
33.60	8335	0.0	0	0.50	Tce
38.42	1574	0.0	0	0.50	Cis 1,3-dcpe
39.69	12947	0.0	0	0.50	Toluene
40.76	2210	0.0	0	0.50	Trans 1,3-dcpe
42.49	5605	0.0	0	0.50	Pce 0.006 AR
45.60	38683	0.0	0	5.00	1cl4fbz (surr)
46.15	12972	0.0	0	0.50	Chlorobenzene
46.40	10827	0.0	0	0.50	Ethylbenzene
46.72	25042	0.0	0	1.00	M/P Xylene
47.18	900664	0.0	0	1.00	1cl2flbz (IS)
48.57	10393	0.0	0	0.50	O Xylene
48.78	13418	0.0	0	0.50	Styrene
49.10	7578	0.0	0	0.00	
50.12	8470	0.0	0	0.50	Isopropylbenzene
51.27	5366	0.0	0	0.00	
51.82	8440	0.0	0	0.50	n-propylbenzene
51.97	14560	0.0	0	0.50	Brombenzene
52.52	24610	0.0	0	1.00	1,3,5-tmb/2-cl tol
52.75	12285	0.0	0	0.50	4-cl toluene
53.99	7066	0.0	0	0.50	t-butylbenzene
54.15	12268	0.0	0	0.50	1,2,4-tmb
54.52	1582	0.0	0	0.00	
54.89	7928	0.0	0	0.50	s-butylbenzene
55.49	8225	0.0	0	0.50	p-isopropyltoluene
55.86	9444	0.0	0	0.50	1,3-dcb
56.35	44098	0.0	0	0.50	1,4-dcb ar = 0.04876
57.25	8717	0.0	0	0.50	n-butylbenzene AB 17 Jun 96
57.90	9740	0.0	0	0.50	1,2-dcb ar = 0.0109
59.21	2187	0.0	0	0.00	
60.19	1503	0.0	0	0.00	
60.48	1442	0.0	0	0.00	
60.79	1641	0.0	0	0.00	
61.60	1160	0.0	0	0.00	
62.73	1611	0.0	0	0.00	

Continued...

File : c:\ezchrom\data1\160603.09
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:23

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
63.26	7907	0.0	0	0.00	
64.19	2543	0.0	0	0.50	1,2,4-tcb
64.61	1222	0.0	0	0.50	Hexachlorobutadiene
65.01	3945	0.0	0	0.50	Napthalene
65.60	1251	0.0	0	0.00	
65.75	1177	0.0	0	0.50	1,2,3-tcb
66.81	2034	0.0	0	0.00	
67.27	1204	0.0	0	0.00	

OUT OF CONTROL EVENT FORM

Date of Event: 06 Jun 96, 05 Jun 96 Method: 8021

Analyst: CT/DF

Out of Control event (check all that apply)	Analyte	% Recovered	Acceptable Range
<input type="checkbox"/> RPD outside of criteria			
<input type="checkbox"/> BS/BSD outside of criteria			
<input type="checkbox"/> MS/MSD outside of criteria			
<input type="checkbox"/> Surrogate outside of criteria			
<input type="checkbox"/> Calibration Verification outside of range			
<input type="checkbox"/> Incorrect amount of Surrogate or spike added			<input type="checkbox"/> Sample lost in lab accident
<input type="checkbox"/> Contract requirements not met			<input type="checkbox"/> Repeat analyzed past holding time
<input type="checkbox"/> Insufficient number QC samples run			<input type="checkbox"/> Instrument failure during analysis
<input type="checkbox"/> Reagents/Standards expired			<input type="checkbox"/> Laboratory contamination
<input type="checkbox"/> Missed holding time			<input type="checkbox"/> Suspected glassware contamination
<input type="checkbox"/> Method blank result greater than MRL			<input type="checkbox"/> Sample result too high to see spike
<input type="checkbox"/> Lab contaminated trip blanks	<input checked="" type="checkbox"/>		<i>contamination</i>
<input type="checkbox"/> Matrix Interference			

Sample affected

For additional Ooce or corrective action use back of page.

Corrective Action not successful successful not applicable

<input checked="" type="checkbox"/> Report to be flagged	<input type="checkbox"/> Rerun result reported	<input type="checkbox"/> Client has been notified	<input checked="" type="checkbox"/> Original results reported
--	--	---	---

Form Completed By: <u>Cousil Turner</u>	Date: <u>17 Jun 96</u>
Laboratory Manager/Supervisor: _____	Date: _____
Quality Assurance Representative: _____	Date: _____

CC. Miller 17 Jun 96

OUT OF CONTROL EVENT FORM

Date of Event: 06.07 Jun 96
 Analyst: UE/CI/MM/TF/TH

Method: 601/602/8021/502.2 *copy*

Out of Control event (check all that apply)	Analyte	% Recovered	Acceptable Range
RPD outside of criteria			
BS/BSD outside of criteria			
MS/MSD outside of criteria			
Surrogate outside of criteria			
Calibration Verification outside of range			
<hr/>			
Incorrect amount of Surrogate or spike added			Sample lost in lab accident
Contract requirements not met			Repeat analyzed past holding time
Insufficient number QC samples run			Instrument failure during analysis
Reagents/Standards expired			Laboratory contamination
Missed holding time			Suspected glassware contamination
Method blank result greater than MRL			Sample result too high to see spike
Lab contaminated trip blanks	✓		RT shift.
Matrix Interference			

Samples Affected

For additional OOCE or corrective action use back of page.

Corrective Action not successful successful not applicable

Report to be flagged	✓	Rerun result reported	✓
Client has been notified	✓	Original results reported	

Form Completed By: Mary Herbert Date: 17 Jun 96
 Laboratory Manager/Supervisor: _____ Date: _____
 Quality Assurance Representative: _____ Date: _____

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.09
 Method : c:\ezchrom\methods\1voa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:23

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
5.16	1493	0.0	0	0.00	
5.72	3740	0.0	0	0.50	DCDFM
6.48	12499	0.0	0	0.50	CHLOROMETHANE
6.79	15983	0.0	0	0.50	VINYL CHLORIDE
7.63	858	0.0	0	0.00	
7.92	291	0.0	0	0.00	
8.23	218	0.0	0	0.50	BROMOMETHANE
8.60	8466	0.0	0	0.50	CHLOROETHANE - 0.014 A.R
8.90	1119	0.0	0	0.00	
9.10	532	0.0	0	0.00	
9.49	12338	0.0	0	0.50	TCFM
10.02	222	0.0	0	0.00	
11.34	7348	0.0	0	0.50	FRECN 113
11.85	541	0.0	0	0.00	
12.20	11812	0.0	0	0.50	1,1-DCE - 0.02 A.R.
12.99	1457	0.0	0	0.00	
15.05	181072	0.0	0	0.50	METH CHLORIDE
16.11	1242	0.0	0	0.00	
16.45	828	0.0	0	0.00	
16.74	7753	0.0	0	0.50	TRANS 1,2-DCE
17.17	769	0.0	0	0.00	
18.71	811	0.0	0	0.00	
19.27	902	0.0	0	0.00	
20.19	5462	0.0	0	0.50	1,1-DCA
21.43	477	0.0	0	0.00	
22.35	1330	0.0	0	0.00	
23.27	613	0.0	0	0.00	
23.54	1657	0.0	0	0.00	
23.89	2025	0.0	0	0.00	
24.39	3234	0.0	0	0.50	2,2-DCPA
24.69	14880	0.0	0	0.50	CIS 1,2-DCE
25.71	20864	0.0	0	0.50	CHLOROFORM 0.036 AR
26.74	2621	0.0	0	0.50	BCM
27.02	669	0.0	0	0.00	
28.03	12251	0.0	0	0.50	1,1,1-TCA - 0.02 AR
28.90	8638	0.0	0	0.50	1,1-DCPE
29.33	13409	0.0	0	0.50	CARBON TET
29.73	695	0.0	0	0.00	
30.63	11125	0.0	0	0.50	1,2-DCA
31.17	487	0.0	0	0.00	
31.73	12308	0.0	0	0.00	
32.22	398	0.0	0	0.00	
32.42	408	0.0	0	0.50	2-CL ETH VI ETH ar=0.000705
32.88	888	0.0	0	0.00	
33.68	15624	0.0	0	0.50	TCE - 0.027 AR

Continued...

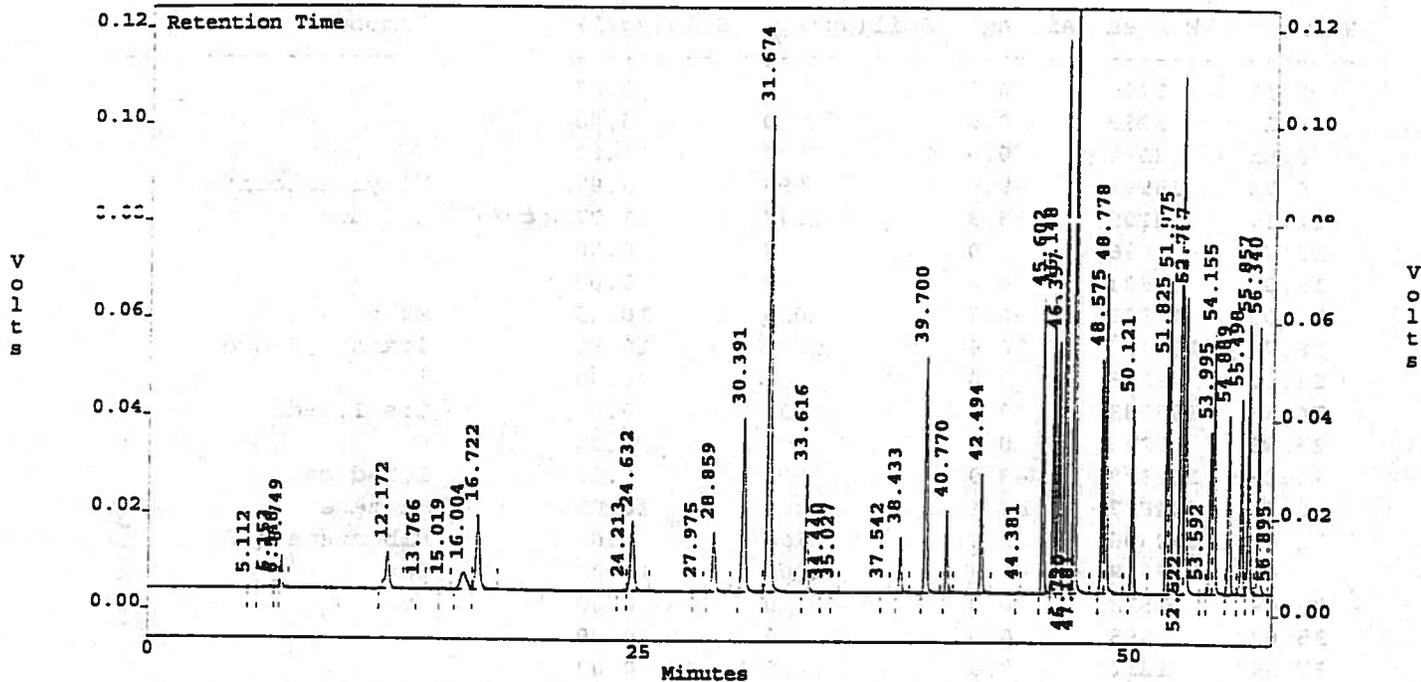
File : c:\ezchrom\data1\160603.09
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:23

Channel 3 Results

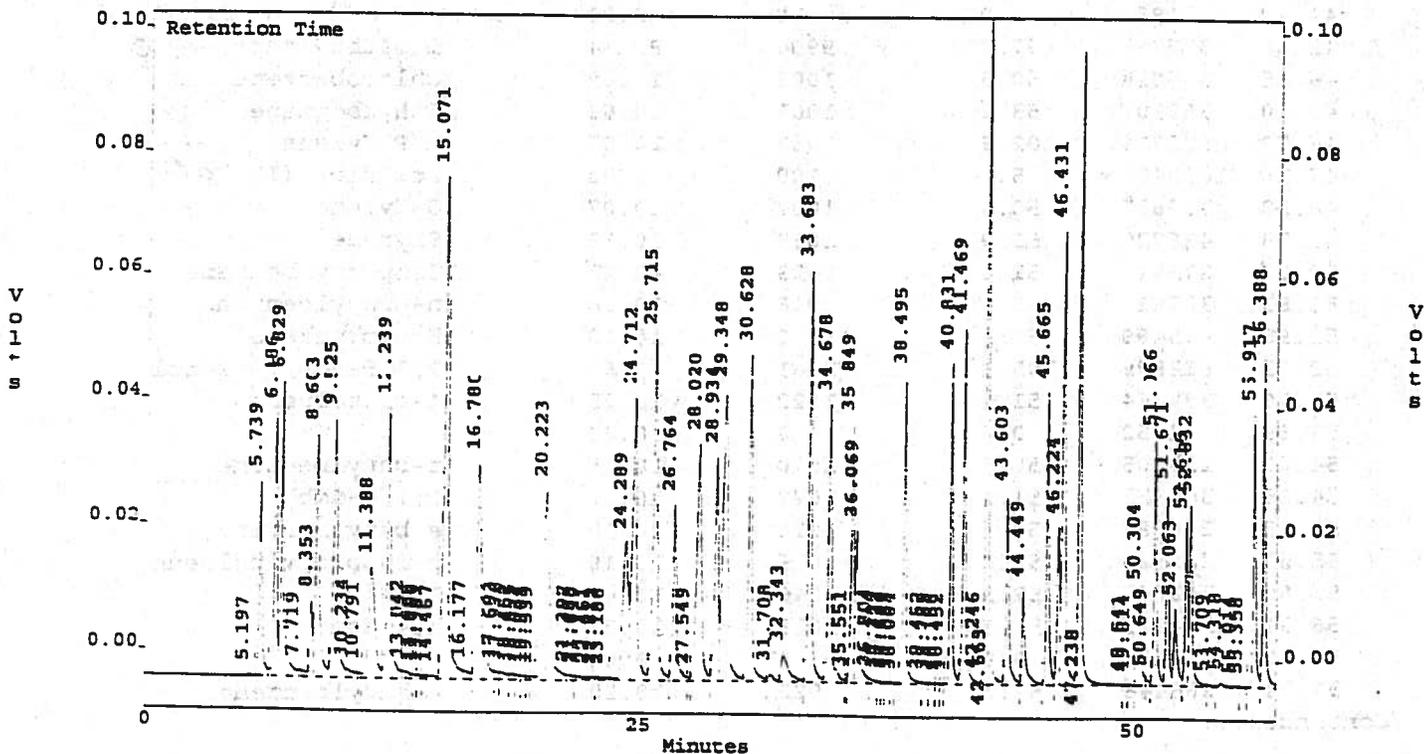
RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
34.09	1410	0.0	0	0.00	
34.69	14390	0.0	0	0.50	1,2-DCPA
35.85	4302	0.0	0	0.50	BRDICLMETHANE
36.04	1300	0.0	0	0.50	DIBROMOMETHANE
36.29	352	0.0	0	0.00	
38.48	5678	0.0	0	0.50	CIS 1,3-DCPE
40.84	3238	0.0	0	0.50	TRANS 1,3-DCPE
41.22	432	0.0	0	0.00	
41.47	10454	0.0	0	0.50	1,1,2-TCA
41.81	1132	0.0	0	0.00	
42.22	418	0.0	0	0.00	
42.58	26646	0.0	0	1.00	1,3 DCPA/PCE
43.68	495	0.0	0	0.50	DIBRCLMETHANE <i>ar = 0.000856</i>
44.34	529	0.0	0	0.50	1,2-DBEA (EDB)
44.63	486	0.0	0	0.00	
45.67	32802	0.0	0	5.00	1CL4FBZ (SURR)
46.25	3701	0.0	0	0.50	CELUROBENZENE
46.45	14481	0.0	0	0.50	1,1,1,2-PCA
47.23	578365	0.0	0	1.00	1CL2FBZ (IS)
48.38	3452	0.0	0	0.00	
49.01	868	0.0	0	0.00	
50.01	403	0.0	0	0.00	
50.52	422	0.0	0	0.50	BROMOFORM <i>ar = 0.000730</i>
50.79	296	0.0	0	0.00	
51.05	7290	0.0	0	0.50	1,1,2,2-PCA <i>17 Jun 96</i>
51.35	513	0.0	0	0.00	
51.70	4622	0.0	0	0.50	1,2,3-TCPA
52.20	886	0.0	0	0.50	BROMOBENZENE
52.60	3527	0.0	0	0.50	2-CL TOLUENE
52.84	3600	0.0	0	0.50	4-CL TOLUENE
53.11	945	0.0	0	0.00	
53.37	294	0.0	0	0.00	
55.93	5050	0.0	0	0.50	1,3-DCB
56.44	6155	0.0	0	0.50	1,4-DCB
56.73	619	0.0	0	0.00	
57.98	6512	0.0	0	0.50	1,2-DCB
58.60	691	0.0	0	0.00	
61.77	674	0.0	0	0.50	1,2-DBr-3-CPA
64.35	1320	0.0	0	0.50	1,2,4-TCB
64.67	1702	0.0	0	0.50	HEXACLBUTADIENE
64.89	1112	0.0	0	0.00	
65.31	558	0.0	0	0.00	
65.81	220	0.0	0	0.50	1,2,3-TCB

McKenzie Laboratories - EPA GC Volatiles
 File : c:\ezchrom\chrom\160605.01
 Method : c:\ezchrom\chrom\1voa0603.met
 Sample ID : CTL VOA 1
 Acquired : Jun 05, 1996 15:41:08
 Printed : Jun 07, 1996 17:18:14

c:\ezchrom\chrom\160605.01 -- Channel A



c:\ezchrom\chrom\160605.01 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160605.01
 Method : c:\ezchrom\chrom\1voa0603.met
 Sample ID : CTL VOA 1
 Acquired : Jun 05, 1996 15:41:08
 Printed : Jun 07, 1996 17:18:16

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.11	1416	0.0	0	0.00	
6.15	5269	0.0	0	0.00	
6.55	2186	0.0	0	0.00	
6.75	35990	49.8	997	9.97	Vinyl Chloride
12.17	110109	58.9	1177	11.77	<i>ok half</i> 1,1-dce
13.77	1436	0.0	0	0.00	
15.02	3804	0.0	0	0.00	
16.00	79968	50.7	1015	10.15	Mtbe
16.72	204427	52.6	1053	10.53	Trans 1,2-dce
24.21	3305	0.0	0	0.00	
24.63	187883	49.7	994	9.94	Cis 1,2-dce
27.98	2226	0.0	0	0.00	
28.86	142378	49.9	997	9.97	1,1-dcpe
30.39	404827	50.4	1009	10.09	Benzene
31.67	1020506	5.0	100	1.00	Flbenzene (IS)
33.62	217858	50.3	1006	10.06	Tce
34.44	1512	0.0	0	0.00	
35.03	1595	0.0	0	0.00	
37.54	1812	0.0	0	0.00	
38.43	83659	53.9	1077	10.77	Cis 1,3-dcpe
39.70	379542	50.3	1006	10.06	Toluene
40.77	109548	53.3	1067	10.67	Trans 1,3-dcpe
42.49	182833	50.8	1016	10.16	Pce
44.38	1880	0.0	0	0.00	
45.60	387385	497.7	9954	99.54	1cl4fbz (surr) 100
46.15	395014	50.5	1009	10.09	Chlorobenzene
46.40	363108	53.2	1063	10.63	Ethylbenzene
46.72	802719	102.9	2057	20.57	M/P Xylene
47.18	1020481 ✓	5.0	100	1.00	1cl2flbz (IS) <i>ok</i>
48.58	325837	50.3	1007	10.07	O Xylene
48.78	436720	51.9	1038	10.38	Styrene
50.12	279844	51.2	1023	10.23	Isopropylbenzene
51.83	302429	50.9	1018	10.18	n-propylbenzene
51.98	419460	50.5	1010	10.10	Bromobenzene
52.52	813899	103.1	2061	20.61	1,3,5-tmb/2-cl tol
52.76	387464	51.1	1022	10.22	4-cl toluene
53.59	2252	0.0	0	0.00	
54.00	237105	50.5	1010	10.10	t-butylbenzene
54.15	365953	51.1	1022	10.22	1,2,4-tmb
54.89	266887	50.5	1010	10.10	s-butylbenzene
55.50	269520	50.8	1016	10.16	p-isopropyltoluene
55.86	343062	52.3	1046	10.46	1,3-dcb
56.34	334925	51.1	1023	10.23	1,4-dcb
56.90	1130	0.0	0	0.00	
57.24	286448	51.0	1020	10.20	n-butylbenzene

Continued...

File .. : c:\ezchrom\chrom\160605.01
 Method : c:\ezchrom\chrom\1voa0603.met
 Sample ID : CTL VOA 1
 Acquired : Jun 05, 1996 15:41:08
 Printed : Jun 07, 1996 17:18:16

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
57.89	273016	51.5	1030	10.30	1,2-dcb
64.15	188620	55.8	1116	11.16	1,2,4-tcb
64.58	163888	64.1	1282	12.82	Hexachlorobutadiene
64.98	223511	52.2	1045	10.45	Napthalene
65.72	177519	58.7	1174	11.74	1,2,3-tcb

*OK
B11c Spk Dup*

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160605.01
 Method : c:\ezchrom\chrom\lvoa0603.met
 Sample ID : CTL VOA 1
 Acquired : Jun 05, 1996 15:41:08
 Printed : Jun 07, 1996 17:18:16

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.20	3238	0.0	0	0.00	
5.74	288141	44.1	883	8.83	DCDFM
6.49	393372	48.5	970	9.70	CHLOROMETHANE
6.83	507203	51.3	1026	10.26	VINYL CHLORIDE
7.72	27079	0.0	0	0.00	
8.35	114849	51.4	1027	10.27	BROMOMETHANE
8.60	520457	53.0	1061	10.61	CHLOROETHANE
9.52	611923	47.8	957	9.57	TCFM
10.23	36093	0.0	0	0.00	
10.70	5900	0.0	0	0.00	
11.39	384475	43.9	878	8.78	FREON 113
12.24	598981	48.3	965	9.65	1,1-DCE
13.04	31239	0.0	0	0.00	
13.60	8449	0.0	0	0.00	
13.77	8522	0.0	0	0.00	
13.98	9039	0.0	0	0.00	
14.47	16262	0.0	0	0.00	
15.07	1261200	68.9	1378	13.78	<i>ok CHC</i> METH CHLORIDE
16.18	28152	0.0	0	0.00	
16.78	605343	52.3	1046	10.46	TRANS 1,2-DCE
17.69	19714	0.0	0	0.00	
17.98	29220	0.0	0	0.00	
18.45	14568	0.0	0	0.00	
18.70	14544	0.0	0	0.00	
19.03	9757	0.0	0	0.00	
19.30	6098	0.0	0	0.00	
19.54	8822	0.0	0	0.00	
20.22	655515	56.8	1137	11.37	1,1-DCA
21.40	17757	0.0	0	0.00	
21.69	6144	0.0	0	0.00	
21.84	10573	0.0	0	0.00	
22.45	17610	0.0	0	0.00	
22.81	4708	0.0	0	0.00	
23.19	11678	0.0	0	0.00	
24.29	444722	76.2	1524	15.24	* 2,2-DCPA
24.71	702458	61.4	1229	12.29	<i>ok CHC</i> CIS 1,2-DCE
25.72	811772	58.7	1174	11.74	↓ CHLOROFORM
26.76	381809	53.2	1065	10.65	BCM
27.55	4483	0.0	0	0.00	
28.02	654595	50.9	1018	10.18	1,1,1-TCA
28.93	448460	53.6	1072	10.72	1,1-DCPE
29.35	838502	57.4	1148	11.48	CARBON TET
30.63	605027	54.8	1097	10.97	1,2-DCA
31.71	22019	0.0	0	0.00	
32.34	116086	55.1	1103	11.03	2-CL ETH VI ETH

Continued...

file : c:\ezchrom\chrom\160605.01
 Method : c:\ezchrom\chrom\1voa0603.met
 sample ID : CTL VOA 1
 acquired : Jun 05, 1996 15:41:08
 printed : Jun 07, 1996 17:18:16

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
33.68	715928	52.5	1049	10.49	TCE
34.68	517759	48.1	962	9.62	1,2-DCPA
35.55	2630	0.0	0	0.00	
35.85	392452	47.6	952	9.52	BRDICLMETHANE
36.07	293995	44.2	883	8.83	DIBROMOMETHANE
36.80	13003	0.0	0	0.00	
37.22	3921	0.0	0	0.00	
37.42	2528	0.0	0	0.00	
37.65	4245	0.0	0	0.00	
37.88	1899	0.0	0	0.00	
38.06	2126	0.0	0	0.00	
38.49	429956	52.4	1048	10.48	CIS 1,3-DCPE
39.45	5314	0.0	0	0.00	
39.78	3510	0.0	0	0.00	
40.16	1522	0.0	0	0.00	
40.45	1273	0.0	0	0.00	
40.83	409472	55.6	1113	11.13	TRANS 1,3-DCPE
41.47	540665	52.4	1049	10.49	1,1,2-TCA
42.25	3184	0.0	0	0.00	
42.56	1113353	98.6	1971	19.71	1,3 DCPA/PCE
43.60	317172	49.6	993	9.93	DIBRCLMETHANE
44.45	190218	49.1	982	9.82	1,2-DBEA (EDB)
45.67	411933	476.9	9538	95.38	1CL4FBZ (SURR) 95
46.22	206156	46.7	935	9.35	CHLOROBENZENE
46.43	739868	54.7	1093	10.93	1,1,1,2-PCA
47.24	916720	5.0	100	1.00	1CL2FBZ (IS) 0.10
49.54	1524	0.0	0	0.00	
49.81	1226	0.0	0	0.00	
50.30	142152	54.4	1088	10.88	BROMOFORM
50.65	11168	0.0	0	0.00	
51.07	365840	51.4	1027	10.27	1,1,2,2-PCA
51.67	280082	46.5	930	9.30	1,2,3-TCPA
52.06	146521	47.1	943	9.43	BROMOBENZENE
52.62	212869	48.1	963	9.63	2-CL TOLUENE
52.83	280998	50.4	1007	10.07	4-CL TOLUENE
53.71	5510	0.0	0	0.00	
54.32	11064	0.0	0	0.00	
55.01	2497	0.0	0	0.00	
55.36	1011	0.0	0	0.00	
55.92	339455	46.6	933	9.33	1,3-DCB
56.39	429399	54.2	1085	10.85	1,4-DCB
57.46	1115	0.0	0	0.00	
57.63	1521	0.0	0	0.00	
57.95	322301	46.5	929	9.29	1,2-DCB
58.80	4372	0.0	0	0.00	
59.32	2929	0.0	0	0.00	
59.56	1496	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160605.01
 Method : c:\ezchrom\chrom\1voa0603.met
 Sample ID : CTL VOA 1
 Acquired : Jun 05, 1996 15:41:08
 Printed : Jun 07, 1996 17:18:16

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
59.77	873	0.0	0	0.00	
60.23	734	0.0	0	0.00	
61.26	47224	41.2	823	8.23	1,2-DBr-3-CPA
61.86	1353	0.0	0	0.00	
62.69	540	0.0	0	0.00	
63.84	3503	0.0	0	0.00	
64.21	323281	50.6	1012	10.12	1,2,4-TCB
64.63	609117	69.6	1392	13.92 *	HEXAChL BUTADIENE
65.77	300529	59.8	1196	11.96 ok	1,2,3-TCB
66.83	3714	0.0	0	0.00	BIC Spk Dup

* out of ± 15% range
 not required for days analysis

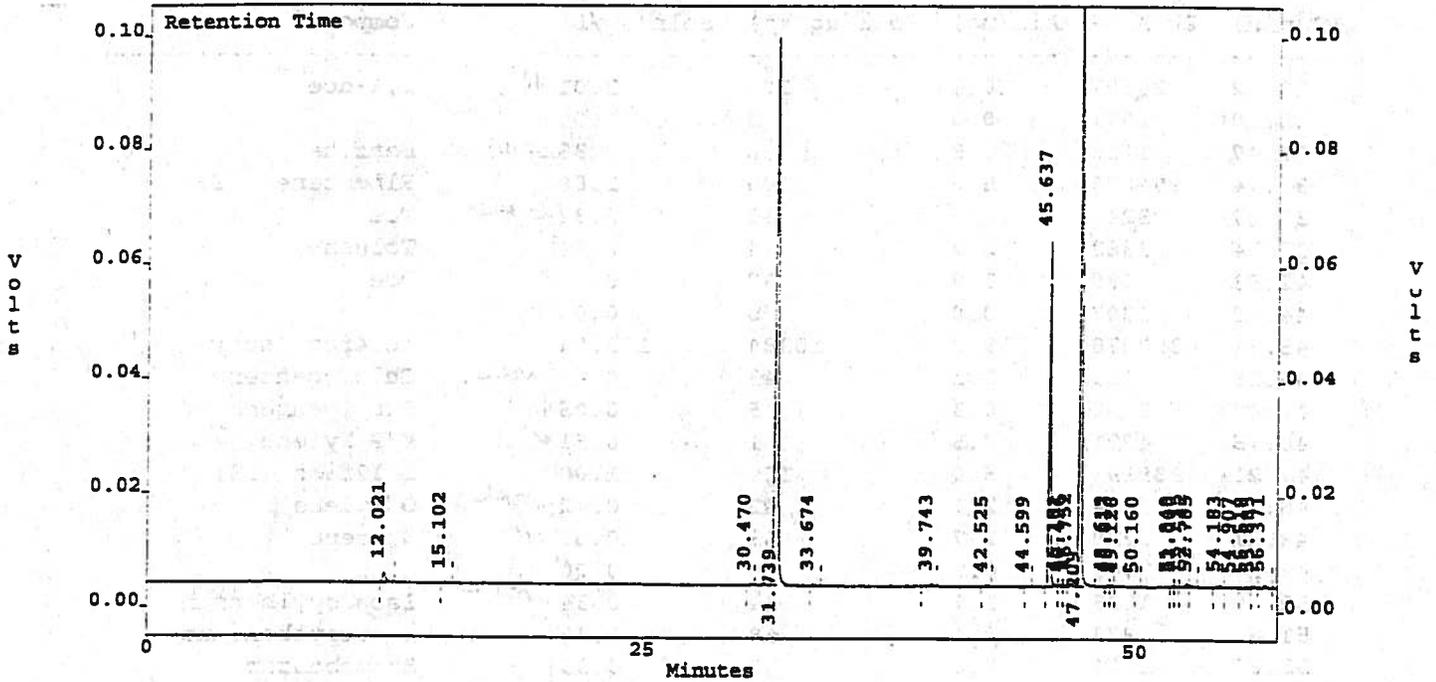
10 Jun 96 U

10/14 Jun 96

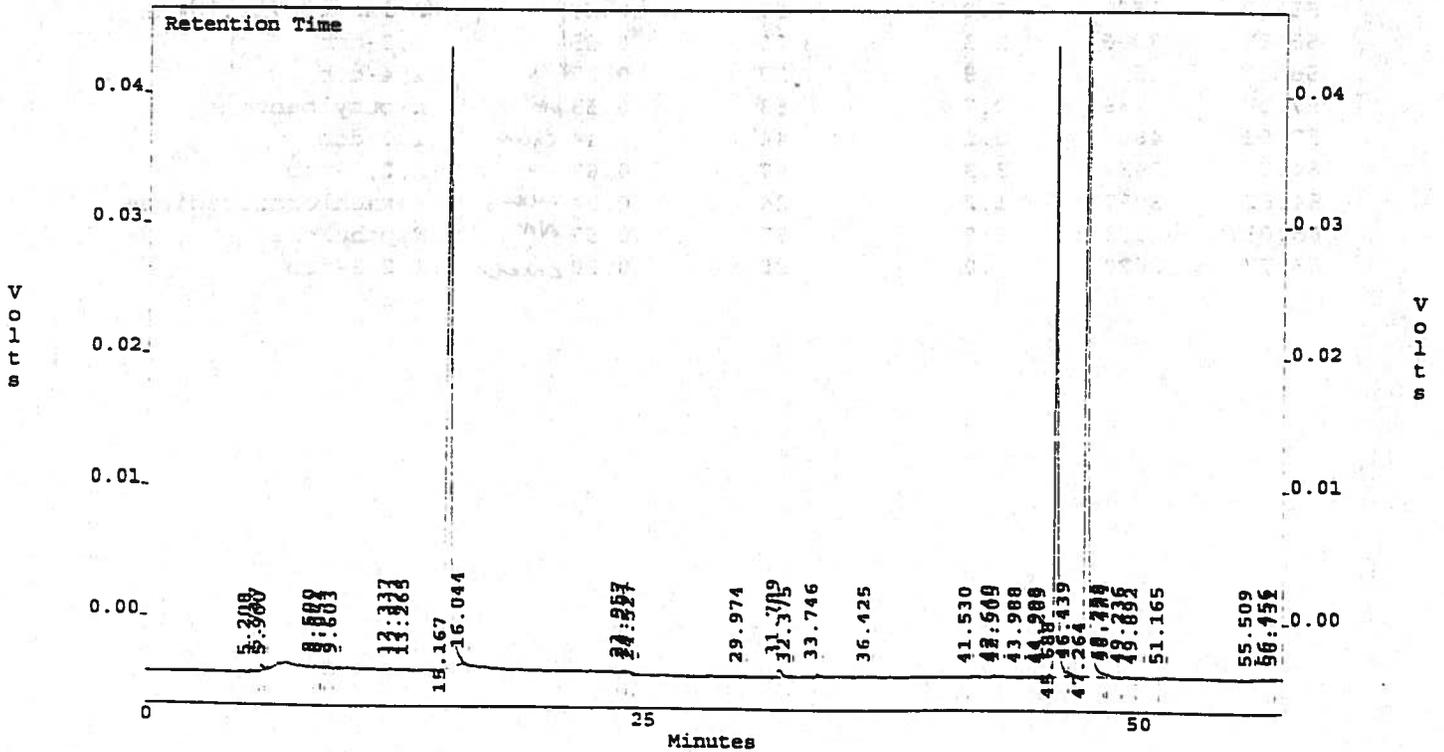
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160605.02
 Method : c:\ezchrom\chrom\1voa0603.met
 Sample ID : MTHD BLKw 2
 Acquired : Jun 05, 1996 17:11:30
 Printed : Jun 07, 1996 17:18:29

c:\ezchrom\chrom\160605.02 -- Channel A



c:\ezchrom\chrom\160605.02 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160605.02
 Method : c:\ezchrom\chrom\lvoa0603.met
 Sample ID : MTHD BLKw 2
 Acquired : Jun 05, 1996 17:11:30
 Printed : Jun 07, 1996 17:18:31

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
12.02	20397	10.1	201	2.01 <i>NC</i>	1,1-dce
15.10	2071	0.0	0	0.00	
30.47	1316	1.8	35	0.35 <i>µMCL</i>	Benzene
31.74	994078	5.0	100	1.00	Flbenzene (IS)
33.67	3243	1.6	32	0.32 <i>µMCL</i>	Tce
39.74	3362	2.2	44	0.44	Toluene
42.53	2086	1.8	37	0.37 <i>µ</i>	Pce
44.60	1307	0.0	0	0.00	
45.64	392278	519.2	10384	103.84	1cl4fbz (surr) <i>104' /</i>
46.18	3155	2.1	43	0.43 <i>µMCL</i>	Chlorobenzene
46.43	2152	0.3	5	0.05	Ethylbenzene
46.75	4921	2.5	51	0.51	M/P Xylene
47.21	989993	5.0	100	1.00	1cl2flbz (IS)
48.61	1904	2.1	42	0.42 <i>µMCL</i>	O Xylene
48.81	2239	2.7	53	0.53 <i>NM</i>	Styrene
49.13	1743	0.0	0	0.00	
50.16	1138	1.7	34	0.34 <i>µMCL</i>	Isopropylbenzene
51.85	1922	2.4	48	0.48	n-propylbenzene
52.00	2104	2.0	39	0.39	Bromobenzene
52.54	5926	3.6	72	0.72	1,3,5-tmb/2-cl tol
52.79	3154	2.0	40	0.40	4-cl toluene
54.18	5463	2.2	43	0.43	1,2,4-tmb
54.91	2620	3.0	60	0.60	s-butylbenzene
55.52	2567	2.9	57	0.57	p-isopropyltoluene
55.89	3006	1.3	25	0.25	1,3-dcb
56.37	6591	1.8	37	0.37	1,4-dcb
57.27	3736	2.7	53	0.53 <i>NM</i>	n-butylbenzene
57.92	4802	2.2	44	0.44 <i>µMCL</i>	1,2-dcb
64.20	2459	3.3	67	0.67 <i>µ</i>	1,2,4-tcb
64.62	3097	1.2	24	0.24 <i>µMCL</i>	Hexachlorobutadiene
65.03	3173	2.9	57	0.57 <i>NM</i>	Napthalene
65.77	2620	1.0	20	0.20 <i>µMCL</i>	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160605.02
 Method : c:\ezchrom\chrom\1voa0603.met
 Sample ID : MTHD BLKw 2
 Acquired : Jun 05, 1996 17:11:30
 Printed : Jun 07, 1996 17:18:31

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.21	2331	0.0	0	0.00	
5.75	4100	4.5	89	0.89	DCDFM *
5.96	223	0.0	0	0.00	
8.50	542	2.7	54	0.54 <i>µmol/µL</i> ✓	CHLOROETHANE
8.87	371	0.0	0	0.00	
9.05	320	0.0	0	0.00	
9.60	886	2.7	53	0.53 <i>µmol/µL</i> ✓	TCFM
12.34	886	2.8	56	0.56 ↓ ✓	1,1-DCE
12.87	971	0.0	0	0.00	
13.27	1312	0.0	0	0.00	
15.17	664133	31.4	627	6.27	METH CHLORIDE *
16.04	1540	0.0	0	0.00	
23.96	2506	0.0	0	0.00	
24.20	2242	2.9	59	0.59 <i>pk sup</i>	2,2-DCPA
24.53	356	0.6	12	0.12 <i>µmol</i>	CIS 1,2-DCE
29.97	519	0.0	0	0.00	
31.79	10388	0.0	0	0.00	
32.37	368	5.7	113	1.13 <i>µmol/µL</i> ✓	2-CL ETH VI ETH (<i>av = 000042</i>)
33.75	2810	0.0	0	0.00	
36.42	727	0.0	0	0.00	
41.53	336	3.0	60	0.60 <i>µmol/µL</i>	1,1,2-TCA
42.64	1916	1.1	21	0.21 <i>µmol</i>	1,3 DCPA/PCE
42.90	912	0.0	0	0.00	
43.99	1001	0.0	0	0.00	
45.00	357	0.0	0	0.00	
45.21	471	0.0	0	0.00	
45.69	424449	507.0	10140	101.40	1CL4FBZ (SURR) |O|
46.44	3348	0.0	0	0.00	1,1,1,2-PCA
47.26	883591	5.0	100	1.00	1CL2FBZ (IS)
48.23	2250	0.0	0	0.00	
48.42	4143	0.0	0	0.00	
49.24	1613	0.0	0	0.00	
49.89	613	0.0	0	0.00	
51.16	1109	5.2	104	1.04 <i>pk sup</i>	1,1,2,2-PCA
55.51	1265	0.0	0	0.00	
56.46	891	3.7	74	0.74 <i>µmol/µL</i> ✓	1,4-DCB
56.73	1134	0.0	0	0.00	
57.37	423	0.0	0	0.00	
58.01	1862	3.6	71	0.71 <i>NC</i>	1,2-DCB
60.36	546	0.0	0	0.00	
64.70	14473	4.5	89	0.89 <i>NC</i>	HEXACLBUTADIENE
65.33	3054	0.0	0	0.00	
65.83	2204	2.0	40	0.40 <i>µmol</i>	1,2,3-TCB
66.23	971	0.0	0	0.00	
66.96	335	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160605.02
 Method : c:\ezchrom\chrom\lvoa0603.met
 Sample ID : MTHD BLKw 2
 Acquired : Jun 05, 1996 17:11:30
 Printed : Jun 07, 1996 17:18:31

Channel B Results

RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
67.34	288	0.0	0	0.00	

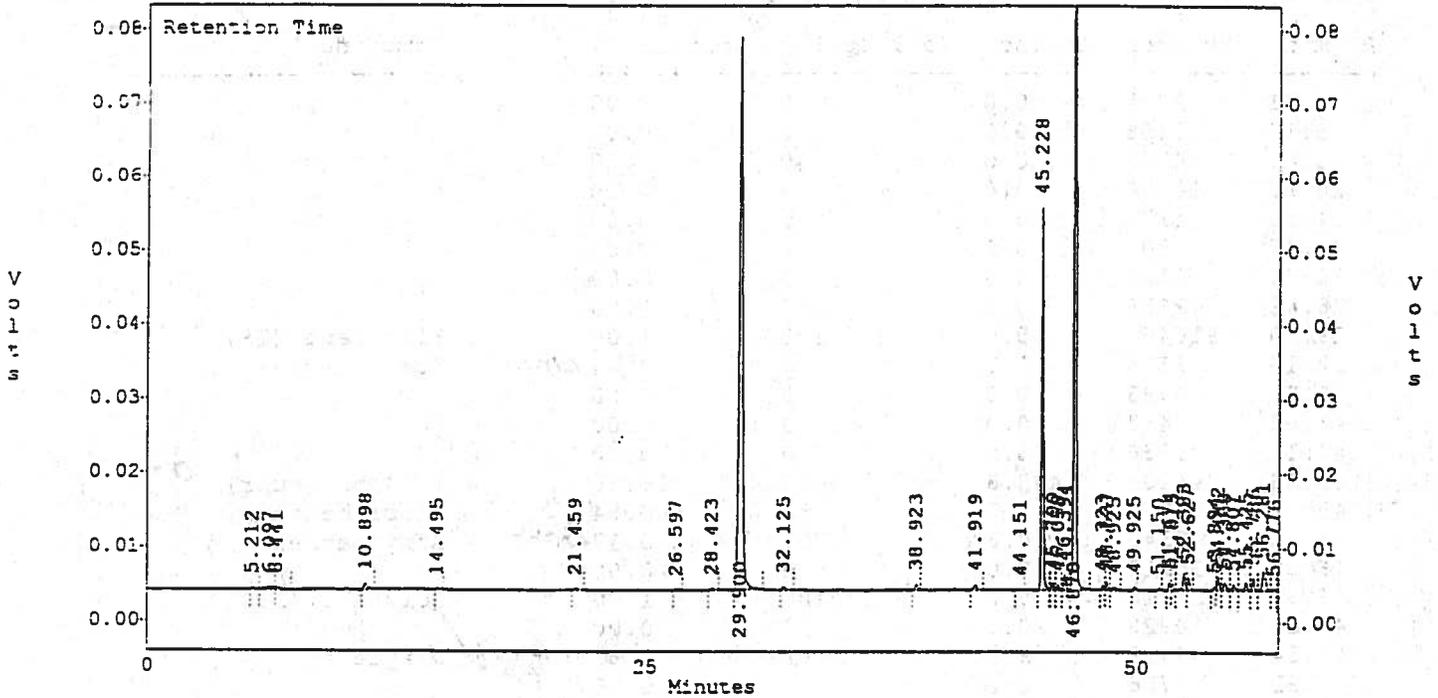
* DCOFM / Methylene
 Chloride contamination.
 OOC has been generated
 AMB 13 Jun 96

AB14 Jun 96

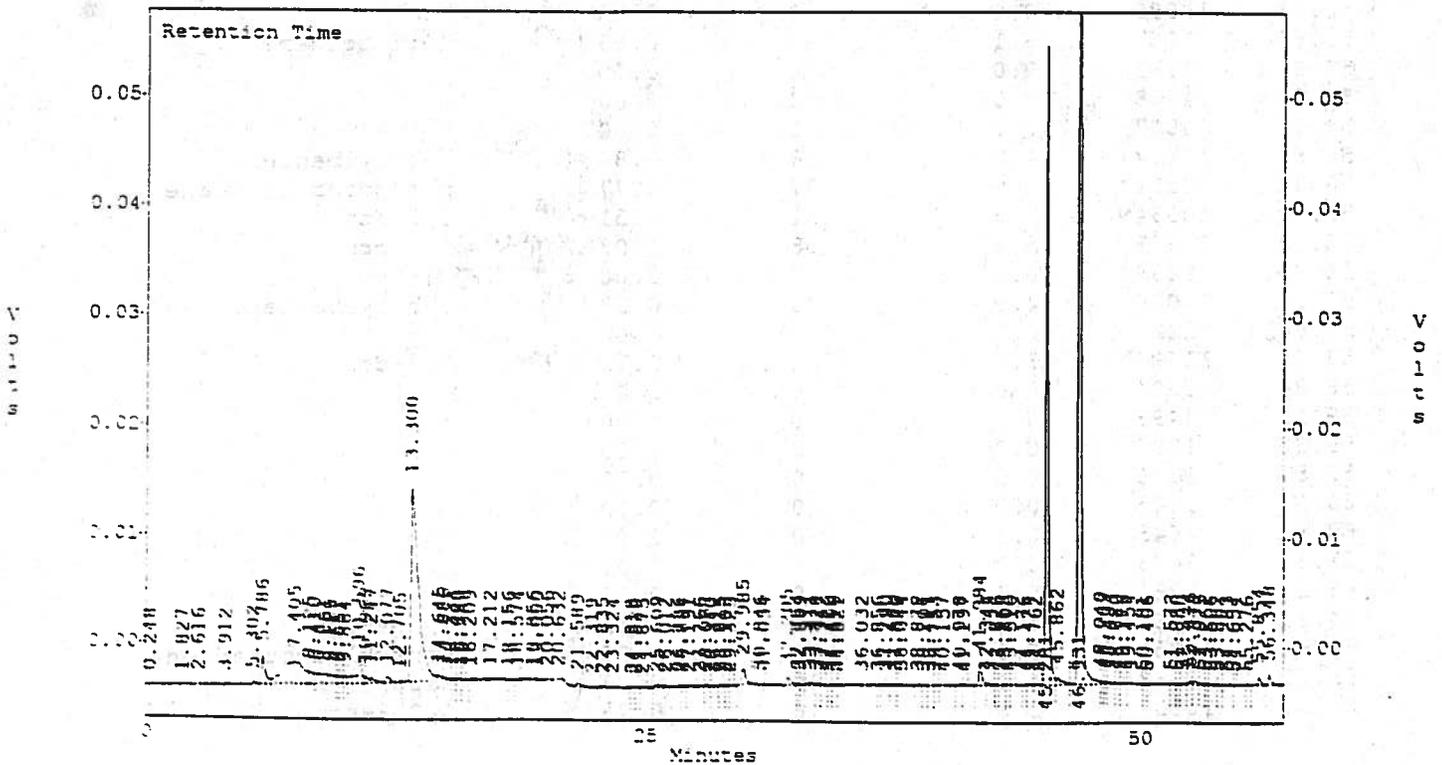
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160605.14
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5049s 14
 Acquired : Jun 06, 1996 12:15:16
 Printed : Jun 12, 1996 16:37:14

c:\ezchrom\voatemp\160605.14 -- Channel A



c:\ezchrom\voatemp\160605.14 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160605.14
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5049s 14
 Acquired : Jun 06, 1996 12:15:16
 Printed : Jun 12, 1996 16:37:16

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.21	2225	0.0	0	0.00	
6.10	7166	0.0	0	0.00	
6.44	4763	0.0	0	0.00	
10.90	12408	0.0	0	0.00	
14.50	1173	0.0	0	0.00	
21.46	3201	0.0	0	0.00	
26.60	1195	0.0	0	0.00	
28.42	2656	0.0	0	0.00	
29.90	916461	5.0	100	1.00	Flbenzene (IS)
32.13	5314	2.2	44	0.44	Tce <i>cmtL</i>
38.92	6793	0.0	0	0.00	
41.92	7457	0.0	0	0.00	
44.15	1356	0.0	0	0.00	
45.23	344208	482.8	9656	96.56	1cl4fbz (surr) <i>97% /</i>
45.79	7177	2.7	54	0.54	Chlorobenzene <i>NC</i>
46.06	5542	0.8	17	0.17	Ethylbenzene <i>cmtL</i>
46.39	15228	0.0	0	0.00	
46.87	935110	5.0	100	1.00	1cl2flbz (IS)
48.32	4920	0.0	0	0.00	
48.54	7415	3.0	61	0.61	O Xylene <i>cmtL by AF</i>
48.92	4706	0.0	0	0.00	
49.92	3651	2.2	44	0.44	Isopropylbenzene <i>cmtL</i>
51.15	1527	0.0	0	0.00	
51.67	6844	0.0	0	0.00	
51.82	6419	3.2	64	0.64	n-propylbenzene <i>cmtL</i>
52.38	19898	0.0	0	0.00	
52.63	11067	3.1	63	0.63	4-cl toluene <i>NM</i>
53.89	3871	0.0	0	0.00	
54.06	14068	0.0	0	0.00	
54.37	11007	0.0	0	0.00	
54.81	7494	4.0	80	0.80	s-butylbenzene <i>cmtL</i>
55.42	7559	3.9	77	0.77	p-isopropyltoluene <i>↓</i>
55.79	10584	2.5	51	0.51	1,3-dcb <i>NOR</i>
56.28	27981	5.4	108	1.08	1,4-dcb <i>Similar</i>
56.78	1439	0.0	0	0.00	<i>EXG 17 JUN 96</i>
57.19	14076	4.6	93	0.93	n-butylbenzene <i>NM</i>
57.64	2224	0.0	0	0.00	
57.85	11697	3.6	72	0.72	1,2-dcb <i>NOR</i>
58.94	1924	0.0	0	0.00	
59.15	4499	0.0	0	0.00	
59.33	1257	0.0	0	0.00	
59.57	1606	0.0	0	0.00	
60.13	1405	0.0	0	0.00	
60.99	4645	0.0	0	0.00	
61.36	3085	0.0	0	0.00	
63.23	6263	0.0	0	0.00	
64.18	9481	5.5	111	1.11	1,2,4-tcb <i>NM</i>
64.61	16051	6.8	136	1.36	Hexachlorobutadiene <i>↓</i>
65.01	9283	4.4	88	0.88	Napthalene
65.76	10232	3.8	76	0.76	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160605.14
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5049s 14
 Acquired : Jun 06, 1996 12:15:16
 Printed : Jun 12, 1996 16:37:16

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
0.25	335	0.0	0	0.00	
1.83	231	0.0	0	0.00	
2.62	728	0.0	0	0.00	
3.91	332	0.0	0	0.00	
5.30	2941	0.0	0	0.00	
5.79	34360 ✓	8.0	160	1.60	DCDFM
7.40	154627	0.0	0	0.00	
8.13	16193	13.9	278	2.78	BROMOMETHANE
8.41	12045	3.6	73	0.73	CHLOROETHANE
8.86	29581	0.0	0	0.00	
9.20	14134	3.5	70	0.70	TCFM
9.51	4493	0.0	0	0.00	
9.65	9571	0.0	0	0.00	
9.88	8887	0.0	0	0.00	
10.60	47453	0.0	0	0.00	
10.96	9099	5.3	107	1.07	FREON 113
11.25	9730	0.0	0	0.00	
12.08	8838	0.0	0	0.00	
12.70	591	0.0	0	0.00	
13.30	469552 ✓	12.6	252	2.52	METH CHLORIDE
14.64	7217	0.0	0	0.00	
14.89	5473	0.0	0	0.00	
15.33	1532	0.0	0	0.00	
15.62	1330	4.2	83	0.83	TRANS 1,2-DCE
15.79	522	0.0	0	0.00	
16.21	1387	0.0	0	0.00	
17.21	256	0.0	0	0.00	
18.16	439	0.0	0	0.00	
18.57	667	5.9	117	1.17	1,1-DCA
19.36	3404	0.0	0	0.00	
19.55	344	0.0	0	0.00	
20.06	1253	0.0	0	0.00	
20.63	787	0.0	0	0.00	
21.59	6064	0.0	0	0.00	
22.32	900	0.0	0	0.00	
22.84	3041	3.0	60	0.60	2,2-DCPA
23.32	1350	0.7	13	0.13	CIS 1,2-DCE
24.32	446	1.7	33	0.33	CHLOROFORM
24.53	841	0.0	0	0.00	
24.88	933	0.0	0	0.00	
25.61	6464	6.5	129	1.29	BCM
26.01	2036	0.0	0	0.00	
26.73	3439	0.0	0	0.00	
26.89	1897	3.5	70	0.70	1,1,1-TCA
27.19	3974	0.0	0	0.00	
27.77	1609	0.5	11	0.11	1,1-DCPE
28.07	2189	0.0	0	0.00	
28.34	1096	1.9	39	0.39	CARBON TET
28.82	1276	0.0	0	0.00	
29.10	507	0.0	0	0.00	
29.32	444	0.0	0	0.00	

ex calculation:
 $(20.0\text{ mL})(8.0\text{ ug}) / (0.050\text{ mL})(25.5\text{ g}) = 125\text{ ug/g}$

Not *
 PK SHP
 ↓

Not * @ AS 17 Jun 96

198 ug/kg <MRL

NC

1.17 µM by AR ✓

NM

µM

NM

µM by AR ✓

µM

Continued...

File : c:\ezchrom\voatemp\160605.14
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5049s 14
 Acquired : Jun 06, 1996 12:15:16
 Printed : Jun 12, 1996 16:37:16

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
29.99	25015	0.0	0	0.00	
30.85	498	0.0	0	0.00	
31.03	210	0.0	0	0.00	
32.21	11251	0.0	0	0.00	
32.75	1134	0.0	0	0.00	
32.89	1477	2.1	43	0.43 <i>cmcl</i>	TCE
33.41	5428	0.0	0	0.00	
33.73	2066	0.0	0	0.00	
33.95	894	0.2	3	0.03	1,2-DCPA
34.40	764	0.0	0	0.00	
34.62	890	0.0	0	0.00	
34.82	395	0.0	0	0.00	
36.03	371	0.0	0	0.00	
36.96	255	0.0	0	0.00	
37.29	1146	0.0	0	0.00	
37.68	1638	0.0	0	0.00	
37.83	495	0.0	0	0.00	
38.04	1118	4.4	88	0.88 <i>NC</i>	CIS 1,3-DCPE
38.88	1290	0.0	0	0.00	
39.20	650	0.0	0	0.00	
39.45	563	0.0	0	0.00	
39.75	613	0.0	0	0.00	
40.16	544	0.0	0	0.00	
40.98	1222	0.0	0	0.00	
41.20	862	3.0	61	0.61 <i>cmcl by ARV</i>	1,1,2-TCA
41.98	20551	2.4	49	0.49 <i>cmcl</i>	1,3 DCPA/PCE
42.34	2746	0.0	0	0.00	
42.83	692	0.0	0	0.00	
43.16	937	0.0	0	0.00	
43.30	585	5.9	118	1.18 <i>cmcl by ARV</i>	DIBRCLMETHANE
43.51	576	0.0	0	0.00	
44.18	507	6.0	121	1.21 <i>NM</i>	1,2-DBEA (EDB)
44.42	856	0.0	0	0.00	
44.76	999	0.0	0	0.00	
45.28	486263	482.6	9652	96.52	1CL4FBZ (SURR)
45.86	15162	0.0	0	0.00	
46.93	1068110	5.0	100	1.00	1CL2FBZ (IS)
48.04	2565	0.0	0	0.00	
48.21	2050	0.0	0	0.00	
48.43	3105	0.0	0	0.00	
48.82	1260	0.0	0	0.00	
49.18	1076	0.0	0	0.00	
49.45	313	0.0	0	0.00	
50.18	417	3.3	66	0.66 <i>cmcl by ARV</i>	BROMOFORM
50.41	261	0.0	0	0.00	
51.37	745	4.3	86	0.86 <i>cmcl</i>	1,2,3-TCPA
51.88	506	5.6	112	1.12 <i>NC</i>	BROMOBENZENE
52.20	965	0.0	0	0.00	
52.50	3009	3.9	73	0.78 <i>NC</i>	2-CL TOLUENE
52.71	5315	4.0	81	0.81 <i>NM</i>	4-CL TOLUENE
52.98	2097	0.0	0	0.00	
53.26	721	0.0	0	0.00	
53.51	2423	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160605.14
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5049s 14
 Acquired : Jun 06, 1996 12:15:16
 Printed : Jun 12, 1996 16:37:16

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
53.86	1078	0.0	0	0.00	
54.28	2598	0.0	0	0.00	
54.65	457	0.0	0	0.00	
55.28	277	0.0	0	0.00	
55.85	8342 ✓	3.4	68	0.68	1,3-DCB
56.35	11799	4.8	96	0.96	1,4-DCB
57.92	8915 ✓	4.3	87	0.87	1,2-DCB
58.39	836	0.0	0	0.00	
58.72	616	0.0	0	0.00	
59.24	412	0.0	0	0.00	
59.43	413	0.0	0	0.00	
59.97	1671	0.0	0	0.00	
60.31	903	0.0	0	0.00	
60.59	934	0.0	0	0.00	
61.38	3315	11.8	236	2.36 NM	1,2-DBr-3-CPA
61.92	1209	0.0	0	0.00	
62.28	924	0.0	0	0.00	
62.45	591	0.0	0	0.00	
62.71	669	0.0	0	0.00	
64.25	11910	6.4	128	1.28 NM	1,2,4-TCB
64.67	58384	8.3	166	1.66	HEXACL BUTADIENE
65.42	4101	0.0	0	0.00	
65.83	17012	4.4	88	0.88	1,2,3-TCB
66.36	1496	0.0	0	0.00	
66.67	325	0.0	0	0.00	
66.87	687	0.0	0	0.00	
67.06	226	0.0	0	0.00	
67.29	738	0.0	0	0.00	

53 µg @ ABF Jun 96
 53 µg/kg
 67 µg/kg

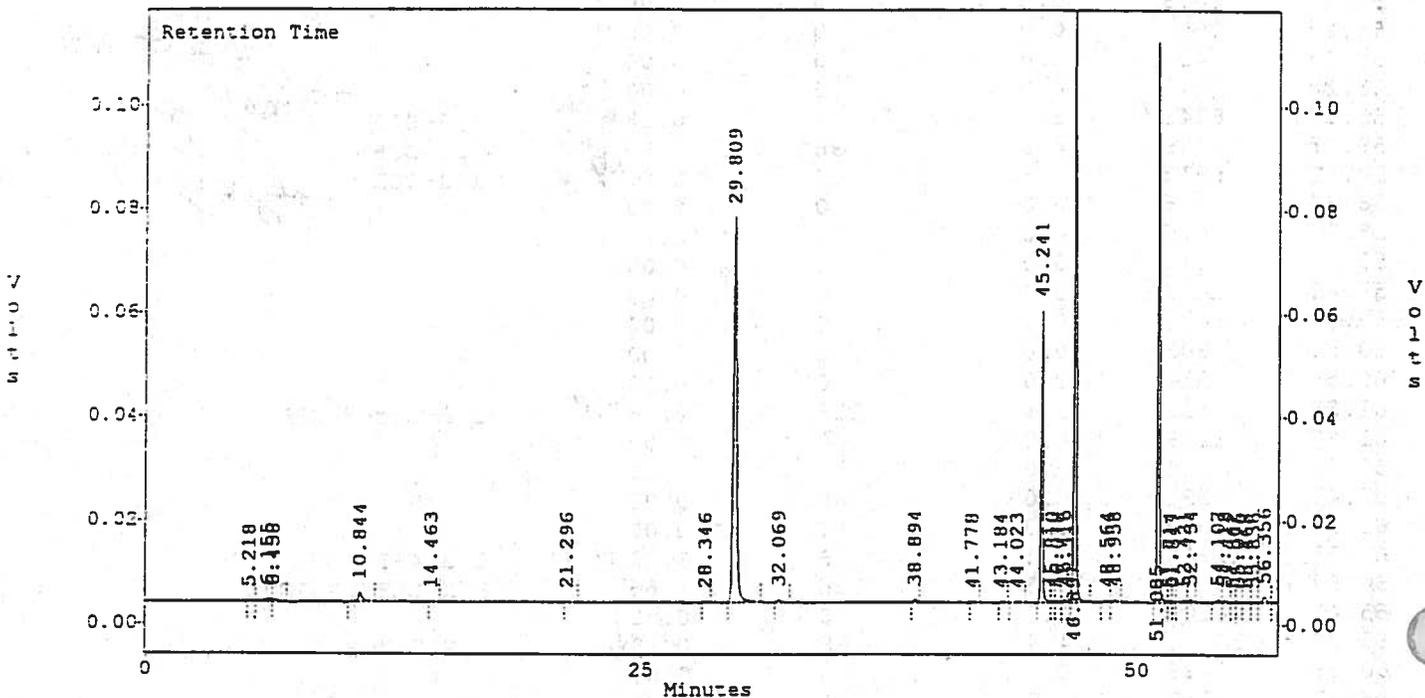
Reported this run.
 UI 12 Jun 96

*Report these numbers, note that
 NC in repeat past holding time.
 See DOC.
 ABF 17 Jun 96

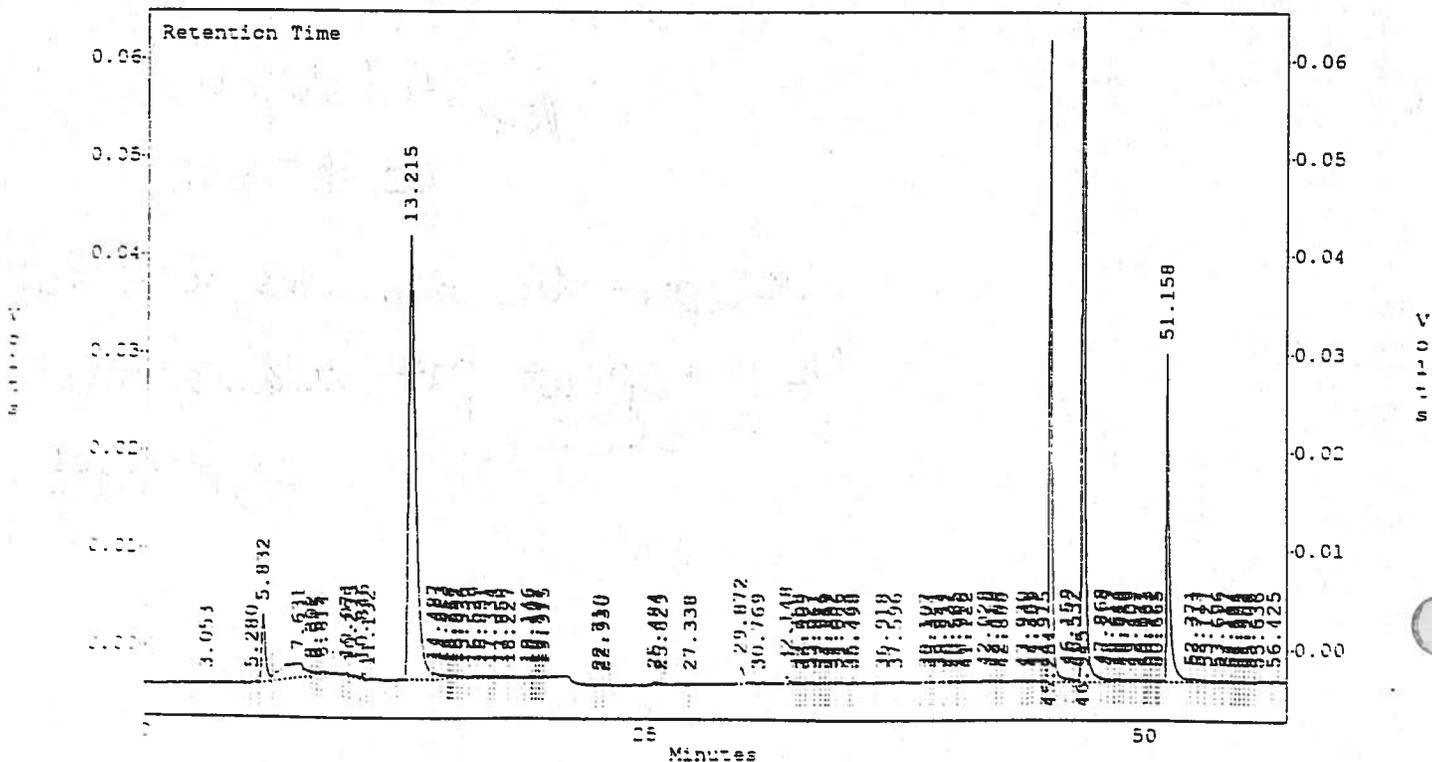
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160605.15
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5050s 15
 Acquired : Jun 06, 1996 13:37:48
 Printed : Jun 12, 1996 16:41:59

c:\ezchrom\voatemp\160605.15 -- Channel A



c:\ezchrom\voatemp\160605.15 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160605.15
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5050s 15
 Acquired : Jun 06, 1996 13:37:48
 Printed : Jun 12, 1996 16:42:01

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.22	1358	0.0	0	0.00	
6.16	9656	0.0	0	0.00	
6.46	6094	0.0	0	0.00	
10.84	26938	0.0	0	0.00	
14.46	1396	0.0	0	0.00	
21.30	2532	0.0	0	0.00	
28.35	1956	0.0	0	0.00	
29.81	924612	5.0	100	1.00	Flbenzene (IS)
32.07	6418	2.4	48	0.48 <i>cmcl</i>	Tce
38.89	5213	0.0	0	0.00	
41.78	2244	0.0	0	0.00	
43.18	1268	0.0	0	0.00	
44.02	2194	0.0	0	0.00	
45.24	375708	515.9	10318	103.18	1cl4fbz (surr) 103 /
45.81	2608	2.1	42	0.42 <i>cmcl</i>	Chlorobenzene
46.08	2031	0.3	5	0.05	Ethylbenzene
46.42	4417	2.5	50	0.50	M/P Xylene
46.90	954246	5.0	100	1.00	1cl2flbz (IS)
48.56	3627	2.4	48	0.48 <i>cmcl</i>	O Xylene
48.96	5374	3.1	61	0.61 <i>NM</i>	Styrene
51.08	677535	0.0	0	0.00	
51.71	2464	0.0	0	0.00	
51.85	1655	2.4	47	0.47 <i>cmcl</i>	n-propylbenzene
52.42	4780	3.5	70	0.70	1,3,5-tmb/2-cl tol
52.73	5416	2.3	47	0.47	4-cl toluene
54.11	6351	2.3	47	0.47	1,2,4-tmb
54.42	4477	0.0	0	0.00	
54.86	1751	2.9	57	0.57	s-butylbenzene
55.08	2056	0.0	0	0.00	
55.47	1317	2.6	53	0.53	p-isopropyltoluene
55.84	1823	1.1	22	0.22	1,3-dcb
56.36	15286	3.3	66	0.66 <i>NC</i>	1,4-dcb
57.23	3991	2.7	55	0.55 <i>NM</i>	n-butylbenzene
57.90	4768	2.2	44	0.44 <i>cmcl</i>	1,2-dcb
59.19	2476	0.0	0	0.00	
60.19	2549	0.0	0	0.00	
63.27	4747	0.0	0	0.00	
64.23	1347	3.0	61	0.61 <i>NM</i>	1,2,4-tcb
65.06	2073	2.6	53	0.53	Napthalene

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160605.15
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5050s 15
 Acquired : Jun 06, 1996 13:37:48
 Printed : Jun 12, 1996 16:42:01

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
3.05	365	0.0	0	0.00	
5.28	1083	0.0	0	0.00	
5.83	93853	14.4	288	2.88	DCDFM
7.63	129707	0.0	0	0.00	
8.30	5813	10.4	207	2.07	BROMOMETHANE
8.54	2984	2.9	57	0.57	CHLOROETHANE
8.81	8773	0.0	0	0.00	
10.07	2871	0.0	0	0.00	
10.30	4700	0.0	0	0.00	
10.85	3016	4.8	95	0.95	FREON 113
11.19	564	0.0	0	0.00	
13.22	1142383	46.3	926	9.26	METH CHLORIDE
14.49	11511	0.0	0	0.00	
14.86	9039	0.0	0	0.00	
15.25	2810	0.0	0	0.00	
15.36	1958	0.0	0	0.00	
15.58	3694	4.3	86	0.86	TRANS 1,2-DCE
15.70	3372	0.0	0	0.00	
15.94	4146	0.0	0	0.00	
16.53	4856	0.0	0	0.00	
16.83	6741	0.0	0	0.00	
17.33	1468	0.0	0	0.00	
17.86	4078	0.0	0	0.00	
18.23	970	0.0	0	0.00	
19.15	1288	0.0	0	0.00	
19.40	661	0.0	0	0.00	
19.60	350	0.0	0	0.00	
19.75	368	0.0	0	0.00	
19.91	336	0.0	0	0.00	
22.71	1597	2.7	55	0.55	2,2-DCPA
22.93	798	0.0	0	0.00	
25.48	5596	6.3	127	1.27	BCM
25.83	694	0.0	0	0.00	
27.34	885	0.0	0	0.00	
29.87	31325	0.0	0	0.00	
30.77	1080	0.0	0	0.00	
32.15	11476	2.7	54	0.54	TCE
32.76	789	0.0	0	0.00	
32.96	783	0.0	0	0.00	
33.33	2141	0.0	0	0.00	
33.56	929	0.0	0	0.00	
33.95	555	0.1	3	0.03	1,2-DCPA
34.15	321	0.0	0	0.00	
34.39	819	0.0	0	0.00	
34.69	682	0.0	0	0.00	
35.36	353	2.5	50	0.50	BRDICLIMETHANE
35.50	337	5.5	110	1.10	DIBROMOMETHANE
36.92	877	0.0	0	0.00	
37.60	626	0.0	0	0.00	
39.11	1218	0.0	0	0.00	
39.32	341	0.0	0	0.00	

Continued...

ex. Calc:
 $(20.0 \text{ mL})(14.4 \text{ ng}) =$
 $(0.050 \text{ mL})(26.6 \text{ ng}) =$
 216.5 µg/g

NOK*
 PKCHP
 ↓

<MAL
 NOK*

NC

NM
 ↓

NC

<MAL

<MAL by AR
 NM

File : c:\ezchrom\voatemp\160605.15
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5050s 15
 Acquired : Jun 06, 1996 13:37:48
 Printed : Jun 12, 1996 16:42:01

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
39.84	1115	0.0	0	0.00	
40.23	1248	0.0	0	0.00	
40.56	883	4.6	92	0.92 <i>NC</i>	TRANS 1,3-DCPE
40.92	883	0.0	0	0.00	
41.12	583	3.0	60	0.60 <i>NM</i>	1,1,2-TCA
42.03	3328	0.0	0	0.00	
42.42	1157	1.0	19	0.19 <i>small</i>	1,3 DCPA/PCE
42.70	881	0.0	0	0.00	
42.89	387	0.0	0	0.00	
43.93	408	0.0	0	0.00	
44.30	1197	6.2	123	1.23 <i>NM</i>	1,2-DBEA(EDB)
44.46	1677	0.0	0	0.00	
44.97	852	0.0	0	0.00	
45.28	551995	509.8	10195	101.95	1CL4FBZ (SURR) 102 /
46.16	5925	0.0	0	0.00	
46.53	3095	0.0	0	0.00	
46.94	1142387 ✓	5.0	100	1.00	1CL2FBZ (IS)
47.87	6561	0.0	0	0.00	
48.22	3485	0.0	0	0.00	
48.64	3294	0.0	0	0.00	
48.82	2382	0.0	0	0.00	
48.99	3784	0.0	0	0.00	
49.41	2029	0.0	0	0.00	
49.88	3646	0.0	0	0.00	
50.06	916	0.0	0	0.00	
50.18	1261	3.6	71	0.71 <i>pk sharp</i>	BROMOFORM
50.42	2095	0.0	0	0.00	
50.67	803	0.0	0	0.00	
51.16	336909	0.0	0	0.00	
52.37	7295	0.0	0	0.00	
52.72	5251	4.0	79	0.79 <i>NC</i>	4-CL TOLUENE
53.13	4521	0.0	0	0.00	
53.70	3674	0.0	0	0.00	
54.12	4108	0.0	0	0.00	
54.40	1580	0.0	0	0.00	
54.57	1450	0.0	0	0.00	
54.80	1814	0.0	0	0.00	
54.98	1446	0.0	0	0.00	
55.21	1522	0.0	0	0.00	
55.64	907	0.0	0	0.00	
56.42	849	3.7	73	0.73 <i>small by AR ✓</i>	1,4-DCB
57.99	3360	3.7	74	0.74 <i>NC</i>	1,2-DCB
59.38	1297	0.0	0	0.00	
59.67	1230	0.0	0	0.00	
60.04	571	0.0	0	0.00	
60.69	653	0.0	0	0.00	
61.32	675	10.3	205	2.05 <i>NM</i>	1,2-DBr-3-CPA
61.48	469	0.0	0	0.00	
61.81	553	0.0	0	0.00	
62.08	1157	0.0	0	0.00	
62.33	686	0.0	0	0.00	
62.49	1066	0.0	0	0.00	
63.08	1967	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160605.15
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5050s 15
 Acquired : Jun 06, 1996 13:37:48
 Printed : Jun 12, 1996 16:42:01

Channel B Results

RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
63.34	1135	0.0	0	0.00	
64.32	1839	5.2	103	1.03 NM	1,2,4-TCB
64.46	674	0.0	0	0.00	
64.78	4848	3.3	65	0.65	↓ HEXACL BUTADIENE
65.04	3519	0.0	0	0.00	
65.43	4405	0.0	0	0.00	
65.70	801	1.7	33	0.33 LML	1,2,3-TCB
65.95	3788	0.0	0	0.00	
66.56	1716	0.0	0	0.00	
66.80	843	0.0	0	0.00	
67.09	776	0.0	0	0.00	

Reported this run.
 UI 19 Jun 96

* report these compounds
 with a note that they are
 not on repeat past
 holding time.

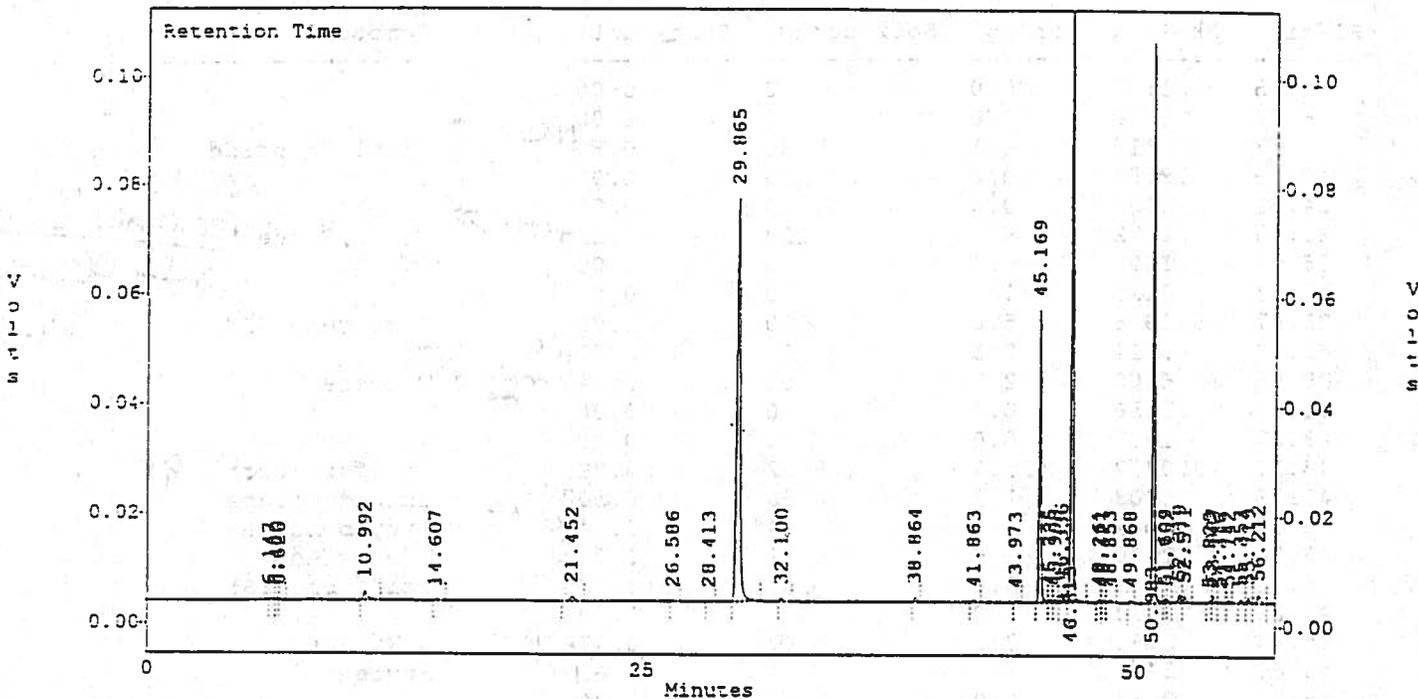
AE 17 Jun 96

AE 19 Jun 96

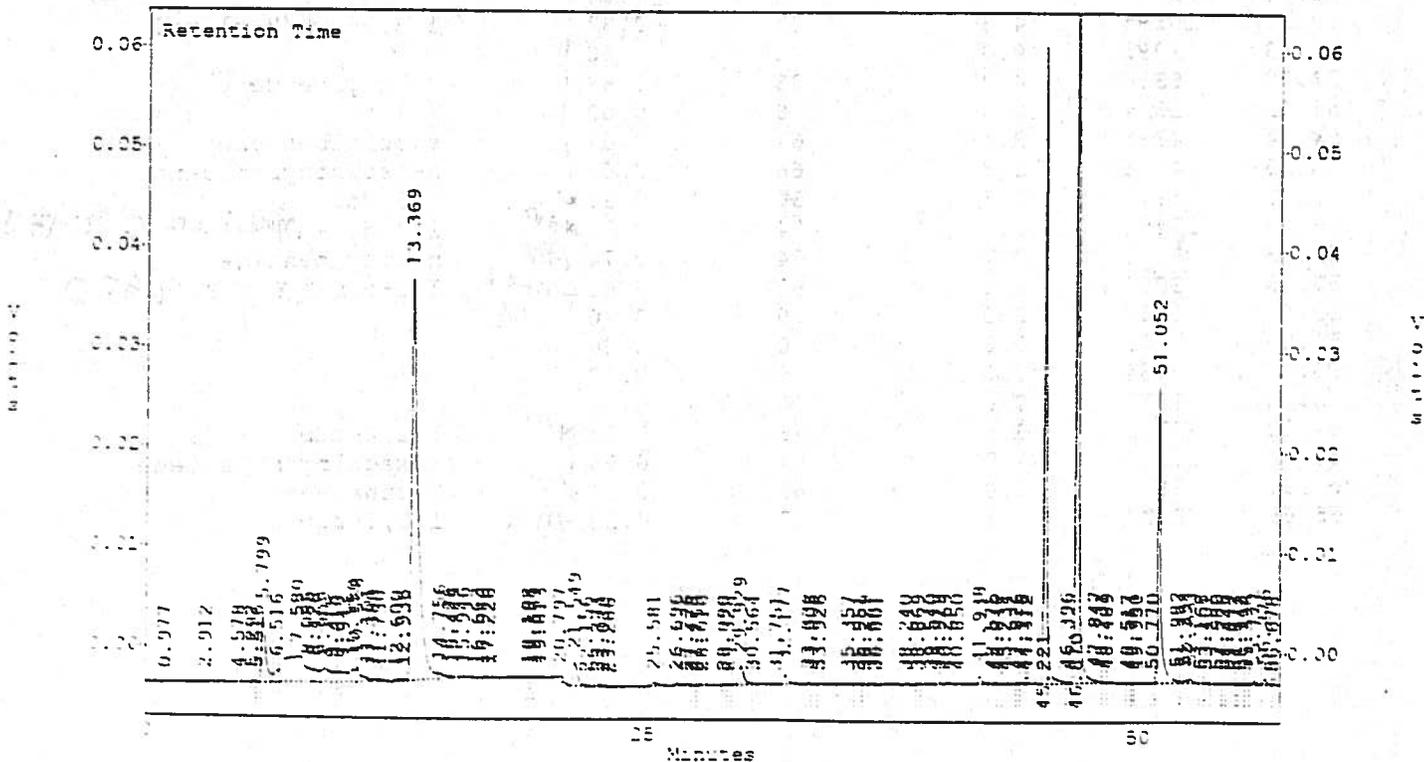
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160605.16
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5051s 16
 Acquired : Jun 06, 1996 15:20:22
 Printed : Jun 12, 1996 16:48:42

c:\ezchrom\voatemp\160605.16 -- Channel A



c:\ezchrom\voatemp\160605.16 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160605.16
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5051s 16
 Acquired : Jun 06, 1996 15:20:22
 Printed : Jun 12, 1996 16:48:44

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
6.15	1507	0.0	0	0.00	
6.48	1510	0.0	0	0.00	
6.63	1317	4.1	82	0.82 ^{NC}	Vinyl Chloride
10.99	22599	0.0	0	0.00	
14.61	2051	0.0	0	0.00	
21.45	14322	6.1	122	1.22 ^{for *}	Cis 1,2-dce ^{ex calc!} (20.0mL)(6.1ng) (0.050mL)(26.0g)
26.59	1402	0.0	0	0.00	
28.41	2125	0.0	0	0.00	
29.87	893978	5.0	100	1.00	Flbenzene (IS) = 94 µg/kg
32.10	6814	2.5	51	0.51 ^{NC}	Tce
38.86	6700	2.7	54	0.54 ^{<MCL by AR}	Toluene
41.86	3856	0.0	0	0.00	
43.97	1337	0.0	0	0.00	
45.17	350862	491.1	9822	98.22	1cl4fbz (surr) 98%.
45.73	5708	2.5	50	0.50 ^{NC}	Chlorobenzene
46.00	4649	0.7	14	0.14 ^{<MCL}	Ethylbenzene
46.34	12210	3.6	71	0.71 [↓]	M/P Xylene
46.81	936913	5.0	100	1.00	1cl2flbz (IS)
48.26	3818	0.0	0	0.00	
48.48	3091	2.3	47	0.47 ^{<MCL}	O Xylene
48.85	5448	3.1	61	0.61 ^{NM}	Styrene
49.87	2716	0.0	0	0.00	
50.98	642007	0.0	0	0.00	
51.61	6112	0.0	0	0.00	
51.75	4680	2.9	58	0.58 ^{<MCL}	n-propylbenzene
52.32	13831	0.0	0	0.00	
52.57	10895	4.3	87	0.87	1,3,5-tmb/2-cl tol
53.83	2995	0.0	0	0.00	
53.99	8316	4.2	83	0.83	t-butylbenzene
54.32	2324	0.0	0	0.00	
54.74	4386	3.4	67	0.67	s-butylbenzene
55.35	4756	3.3	66	0.66	p-isopropyltoluene
55.72	6146	1.8	36	0.36 [↓]	1,3-dcb
56.21	17451	3.7	74	0.74 ^{for}	1,4-dcb <MCL by a.r. 17 Jun 96
57.13	9150	3.7	74	0.74 ^{NM}	n-butylbenzene
57.78	9092	3.1	62	0.62 ^{<MCL by AR}	1,2-dcb a.r. = 0.00970
59.08	1258	0.0	0	0.00	
59.49	1401	0.0	0	0.00	
60.08	2434	0.0	0	0.00	
63.18	1877	0.0	0	0.00	
64.12	3752	3.8	76	0.76 ^{NM}	1,2,4-tcb
64.54	11233	4.7	95	0.95 [↓]	Hexachlorobutadiene
64.95	3650	3.0	61	0.61 [↓]	Napthalene
65.69	2627	1.1	22	0.22 ^{<MCL}	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\160605.16
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5051s 16
 Acquired : Jun 06, 1996 15:20:22
 Printed : Jun 12, 1996 16:48:45

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
0.98	624	0.0	0	0.00	
2.91	425	0.0	0	0.00	
4.58	539	0.0	0	0.00	
5.30	810	0.0	0	0.00	
5.52	323	0.0	0	0.00	
5.80	99940	15.6	311	3.11	DCDFM
6.52	16918	5.3	106	1.06	CHLOROMETHANE
7.58	189051	0.0	0	0.00	
8.09	26708	0.0	0	0.00	
8.43	21289	4.4	87	0.87	CHLOROETHANE
8.91	41572	0.0	0	0.00	
9.32	14969	3.5	70	0.70	TCFM
9.61	14248	0.0	0	0.00	
9.94	20933	0.0	0	0.00	
10.38	24363	0.0	0	0.00	
10.57	24868	0.0	0	0.00	
11.10	2537	0.0	0	0.00	
11.38	6888	0.0	0	0.00	
11.73	3767	3.0	59	0.59	1,1-DCE
12.60	2725	0.0	0	0.00	
12.94	4324	0.0	0	0.00	
13.37	932657	37.4	747	7.47	METH CHLORIDE
14.76	10989	0.0	0	0.00	
15.23	2159	0.0	0	0.00	
15.42	2690	0.0	0	0.00	
15.95	1639	0.0	0	0.00	
16.66	409	0.0	0	0.00	
16.95	854	0.0	0	0.00	
17.23	1804	0.0	0	0.00	
19.20	563	0.0	0	0.00	
19.35	494	0.0	0	0.00	
19.56	925	0.0	0	0.00	
19.81	511	0.0	0	0.00	
20.80	13267	0.0	0	0.00	
21.55	39095	3.5	70	0.70	CIS 1,2-DCE
22.16	1234	0.0	0	0.00	
22.77	3003	3.0	59	0.59	2,2-DCPA
23.02	1650	0.0	0	0.00	
23.29	1176	0.0	0	0.00	
25.58	7258	6.5	131	1.31	BCM
26.70	3171	0.0	0	0.00	
27.24	2792	0.0	0	0.00	
27.48	838	0.0	0	0.00	
27.76	365	0.4	8	0.08	1,1-DCPE
28.01	631	0.0	0	0.00	
28.09	508	0.0	0	0.00	
28.33	406	0.0	0	0.00	
28.93	38155	0.0	0	0.00	
30.56	1157	0.0	0	0.00	
31.75	341	5.6	113	0.55	TCE
32.18	11886	2.8	55	0.55	

Continued...

from 6/17/96
 240 µg/kg in methanol
 field ex.
 NC
 580 µg/kg
 NM
 AB
 2-SE BTH VI BTH
 CMA by AL

File : c:\ezchrom\voatemp\160605.16
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5051s 16
 Acquired : Jun 06, 1996 15:20:22
 Printed : Jun 12, 1996 16:48:45

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln(µg/l)	Compound
33.33	1333	0.0	0	0.00	
33.50	963	0.0	0	0.00	
33.93	585	0.1	3	0.03	1,2-DCPA
35.36	2827	2.8	55	0.55	BRDICLMETHANE
35.95	1485	0.0	0	0.00	
36.23	1135	0.0	0	0.00	
36.68	1872	0.0	0	0.00	
36.80	544	0.0	0	0.00	
38.24	500	0.0	0	0.00	
38.87	487	0.0	0	0.00	
39.54	1721	0.0	0	0.00	
39.92	413	0.0	0	0.00	
40.27	722	0.0	0	0.00	
40.85	596	0.0	0	0.00	
41.94	10351	0.0	0	0.00	
42.58	1937	0.0	0	0.00	
42.85	764	0.0	0	0.00	
43.23	629	5.9	118	1.18	DIBRCLMETHANE
43.84	323	0.0	0	0.00	
44.12	995	0.0	0	0.00	
44.31	212	6.0	120	1.20	1,2-DBEA (EDB)
45.22	532173	512.2	10245	102.45	1CL4FBZ (SURR) 102.1
46.40	1869	0.0	0	0.00	
46.87	1095543	5.0	100	1.00	1CL2FBZ (IS)
47.85	4486	0.0	0	0.00	
48.23	1750	0.0	0	0.00	
48.49	842	0.0	0	0.00	
49.52	934	0.0	0	0.00	
49.75	503	0.0	0	0.00	
49.95	1286	0.0	0	0.00	
50.77	469	5.1	102	1.02	1,1,2,2-PCA
51.05	286380	0.0	0	0.00	
51.98	2461	6.1	121	1.21	BROMOBENZENE
52.39	5505	0.0	0	0.00	
52.63	7704	4.7	94	0.94	2-CL TOLUENE
53.17	915	0.0	0	0.00	
53.40	1291	0.0	0	0.00	
53.98	1691	0.0	0	0.00	
54.23	662	0.0	0	0.00	
54.44	1628	0.0	0	0.00	
54.88	339	0.0	0	0.00	
55.14	822	0.0	0	0.00	
55.40	787	0.0	0	0.00	
55.78	5337	3.0	61	0.61	1,3-DCB
56.28	7109	4.3	86	0.86	1,4-DCB
56.68	277	0.0	0	0.00	
57.42	415	0.0	0	0.00	
57.54	336	0.0	0	0.00	
57.85	12451	4.7	94	0.94	1,2-DCB
58.45	1541	0.0	0	0.00	
58.78	1486	0.0	0	0.00	
59.02	873	0.0	0	0.00	
59.78	2399	0.0	0	0.00	

Continued...

File : c:\ezchrom\voatemp\160605.16
 Method : c:\ezchrom\voatemp\lvoa0606.met
 Sample ID : 5051s 16
 Acquired : Jun 06, 1996 15:20:22
 Printed : Jun 12, 1996 16:48:45

Channel B Results

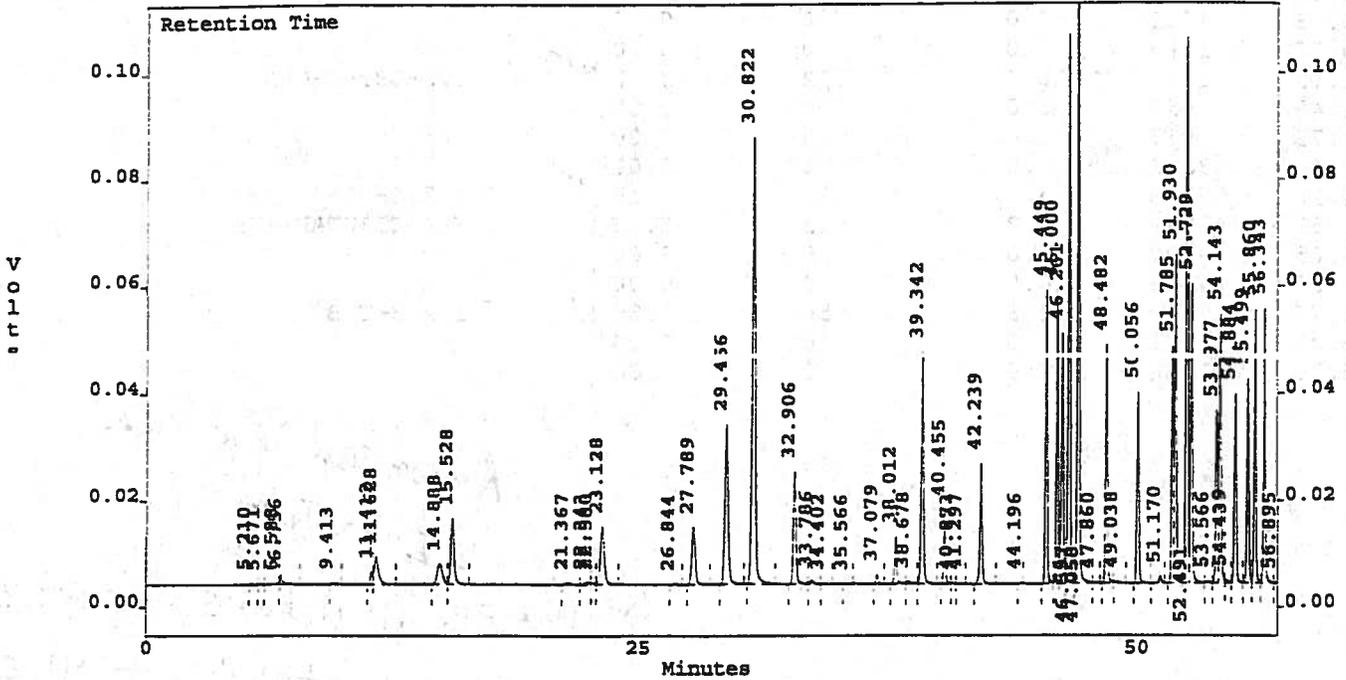
RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
60.07	1474	0.0	0	0.00	
60.33	1732	0.0	0	0.00	
60.77	1068	0.0	0	0.00	
61.11	1285	10.6	212	2.12 NM	1,2-DBr-3-CPA
61.49	958	0.0	0	0.00	
61.79	917	0.0	0	0.00	
63.44	3332	0.0	0	0.00	
64.18	7376	5.8	116	1.16 NM	1,2,4-TCB
64.59	47289	7.2	143	1.43	HEXACLBUTADIENE
65.05	3600	0.0	0	0.00	
65.39	4843	0.0	0	0.00	
65.76	7845	2.8	56	0.56	1,2,3-TCB
66.37	1321	0.0	0	0.00	
66.50	1160	0.0	0	0.00	

Reported this run.
 UI 12 Jun 96
 *These numbers reported
 with a note that the
 repeat past holding time
 does not confirm.

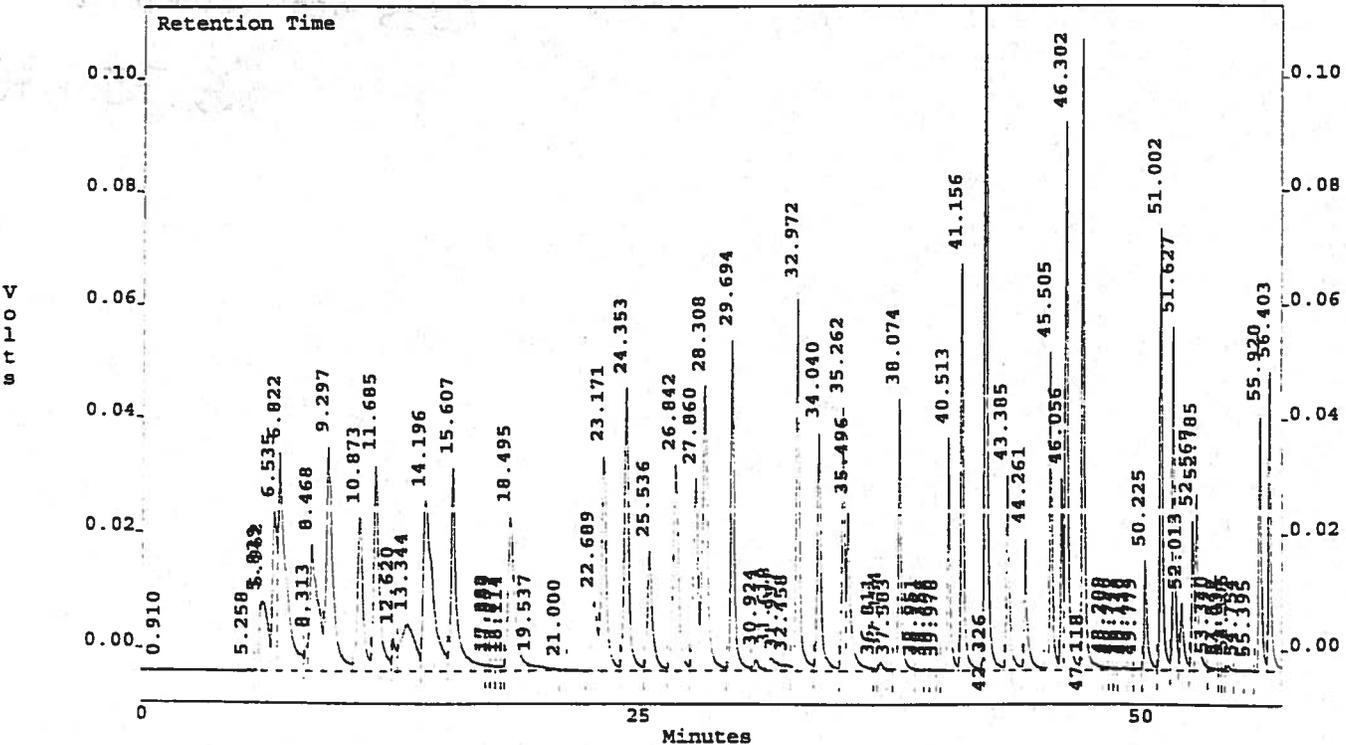
AG 17 Jun 96

McKenzie Laboratories - EPA GC Volatiles
 File : c:\ezchrom\chrom\160605.17
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 07:24:51
 Printed : Jun 07, 1996 17:34:00

c:\ezchrom\chrom\160605.17 -- Channel A



c:\ezchrom\chrom\160605.17 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160605.17
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 07:24:51
 Printed : Jun 07, 1996 17:34:03

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.21	2836	0.0	0	0.00	
5.67	1208	0.0	0	0.00	
6.59	4546	0.0	0	0.00	
6.76	17933	26.8	537	5.37 <i>ok c7c</i>	Vinyl Chloride
9.41	4092	0.0	0	0.00	
11.41	22237	0.0	0	0.00	
11.63	81422	44.8	897	8.97	1,1-dce
14.89	77415	51.0	1019	10.19	Mtbe
15.53	148604	40.1	803	8.03 <i>ok hall</i>	Trans 1,2-dce
21.37	6730	0.0	0	0.00	
22.34	7381	0.0	0	0.00	
22.58	4289	0.0	0	0.00	
23.13	161443	44.6	891	8.91	Cis 1,2-dce
26.84	2453	0.0	0	0.00	
27.79	137233	49.9	998	9.98	1,1-dcpe
29.46	362507	47.0	940	9.40	Benzene
30.82	939573	5.0	100	1.00	Flbenzene (IS)
32.91	204397	49.0	981	9.81	Tce
33.79	8535	0.0	0	0.00	
34.40	1323	0.0	0	0.00	
35.57	1363	0.0	0	0.00	
37.08	14505	0.0	0	0.00	
38.01	68345	46.2	924	9.24	Cis 1,3-dcpe
38.68	6121	0.0	0	0.00	
39.34	350587	48.3	966	9.66	Toluene
40.46	90961	46.5	930	9.30	Trans 1,3-dcpe
40.87	1611	0.0	0	0.00	
41.30	1534	0.0	0	0.00	
42.24	176786	51.0	1019	10.19	Pce
44.20	2068	0.0	0	0.00	
45.45	359738	480.0	9601	96.01	1cl4fbz (surr) 96
46.00	363865	48.3	967	9.67	Chlorobenzene
46.26	331417	50.4	1007	10.07	Ethylbenzene
46.60	744233	99.1	1982	19.82	M/P Xylene
47.06	983067 ✓	5.0	100	1.00	1cl2flbz (IS)
47.86	1946	0.0	0	0.00	
48.48	319423	51.2	1024	10.24	O Xylene
49.04	5848	3.1	62	0.62 <i>ok c7c</i>	Styrene
50.06	262868	49.9	998	9.98	Isopropylbenzene
51.17	11621	0.0	0	0.00	
51.79	283033	49.5	990	9.90	n-propylbenzene
51.93	406446	50.8	1016	10.16	Bromobenzene
52.49	771346	101.4	2029	20.29	1,3,5-tmb/2-cl tol
52.73	366116	50.1	1003	10.03	4-cl toluene
53.57	4038	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160605.17
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 07:24:51
 Printed : Jun 07, 1996 17:34:03

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
53.98	229339	50.7	1014	10.14	t-butylbenzene
54.14	347371	50.4	1007	10.07	1,2,4-tmb
54.44	8168	0.0	0	0.00	
54.88	257457	50.6	1012	10.12	s-butylbenzene
55.50	257362	50.4	1008	10.08	p-isopropyltoluene
55.86	319820	50.6	1012	10.12	1,3-dcb
56.34	313505	49.7	994	9.94	1,4-dcb
56.90	1593	0.0	0	0.00	
57.25	266673	49.3	987	9.87	n-butylbenzene
57.90	276308	54.0	1081	10.81	1,2-dcb
58.55	1659	0.0	0	0.00	
59.18	2583	0.0	0	0.00	
60.19	1744	0.0	0	0.00	
61.22	1502	0.0	0	0.00	
61.69	1267	0.0	0	0.00	
63.23	1374	0.0	0	0.00	
64.19	189225	58.0	1160	11.60 <i>ok hall</i>	1,2,4-tcb
64.62	163825	66.5	1330	13.30 *	Hexachlorobutadiene
65.02	313958	75.2	1504	15.04 <i>ok CRC</i>	Napthalene
65.76	197968	68.0	1359	13.59 <i>ok</i>	1,2,3-tcb

BIC Spk Dup

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160605.17
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 07:24:51
 Printed : Jun 07, 1996 17:34:03

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
0.91	642	0.0	0	0.00	
5.26	3274	0.0	0	0.00	
5.83	82553	14.4	289	2.89	DCDFM
5.95	278832	0.0	0	0.00	
6.53	399222	45.4	907	9.07	CHLOROMETHANE
6.82	985654	90.5	1810	18.10	VINYL CHLORIDE
8.31	52736	26.9	538	5.38	BROMOMETHANE
8.47	591288	55.1	1102	11.02	CHLOROETHANE
9.30	895015	63.3	1265	12.65	TCFM
10.87	541758	55.4	1108	11.08	FREON 113
11.68	692959	51.0	1020	10.20	1,1-DCE
12.62	77359	0.0	0	0.00	
13.34	393439	0.0	0	0.00	
14.20	1015769	47.2	945	9.45	METH CHLORIDE
15.61	710171	55.9	1119	11.19	TRANS 1,2-DCE
17.38	13449	0.0	0	0.00	
17.56	13134	0.0	0	0.00	
17.87	11746	0.0	0	0.00	
18.11	8369	0.0	0	0.00	
18.50	611211	49.4	988	9.88	1,1-DCA
19.54	49904	0.0	0	0.00	
21.00	1500	0.0	0	0.00	
22.69	244554	41.0	819	8.19	2,2-DCPA
23.17	664240	53.5	1071	10.71	CIS 1,2-DCE
24.35	811818	54.0	1079	10.79	CHLOROFORM
25.54	384780	49.6	992	9.92	BCM
26.84	686450	49.0	981	9.81	1,1,1-TCA
27.86	463043	50.7	1015	10.15	1,1-DCPE
28.31	903493	56.7	1134	11.34	CARBON TET
29.69	713422	59.0	1181	11.81	1,2-DCA
30.92	35293	0.0	0	0.00	
31.62	54762	27.0	539	5.39	2-CL ETH VI ETH
32.00	23371	0.0	0	0.00	
32.46	17496	0.0	0	0.00	
32.97	761345	51.2	1024	10.24	TCE
34.04	554683	47.2	945	9.45	1,2-DCPA
35.26	432076	48.0	960	9.60	BRDICLMETHANE
35.50	410378	55.0	1100	11.00	DIBROMOMETHANE
36.81	5490	0.0	0	0.00	
37.15	22814	0.0	0	0.00	
37.58	5524	0.0	0	0.00	
38.07	446974	50.1	1003	10.03	CIS 1,3-DCPE
38.95	8042	0.0	0	0.00	
39.35	3736	0.0	0	0.00	
39.70	4379	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160605.17
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 07:24:51
 Printed : Jun 07, 1996 17:34:03

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
39.98	1726	0.0	0	0.00	
40.51	352134	44.8	896	8.96	TRANS 1,3-DCPE
41.16	691463	61.0	1219	12.19	1,1,2-TCA
42.33	1356324	109.9	2199	21.99	1,3 DCPA/PCE
43.39	355637	50.8	1017	10.17	DIBRCLMETHANE
44.26	257367	59.5	1189	11.89	1,2-DBEA (EDB)
45.51	477016	503.7	10073	100.73	1CL4FBZ (SURR) 101
46.06	250338	51.6	1032	10.32	CHLOROBENZENE
46.30	924177	62.7	1253	12.53	1,1,1,2-PCA
47.12	1000223	5.0	100	1.00	1CL2FBZ (IS) 0/c
48.21	7483	0.0	0	0.00	
48.50	4544	0.0	0	0.00	
48.74	4215	0.0	0	0.00	
49.15	8101	0.0	0	0.00	
49.41	3871	0.0	0	0.00	
49.78	5903	0.0	0	0.00	
50.22	196983	67.4	1348	13.48	BROMOFORM
51.00	671754	83.0	1660	16.60	1,1,2,2-PCA
51.63	491814	72.3	1446	14.46	1,2,3-TCPA
52.01	142184	42.5	851	8.51	BROMOBENZENE
52.57	213706	44.5	891	8.91	2-CL TOLUENE
52.79	306268	50.3	1006	10.06	4-CL TOLUENE
53.34	13522	0.0	0	0.00	
53.84	2803	0.0	0	0.00	
54.04	3277	0.0	0	0.00	
54.31	13889	0.0	0	0.00	
54.75	5254	0.0	0	0.00	
55.39	2847	0.0	0	0.00	
55.92	371818	46.8	936	9.36	1,3-DCB
56.40	447261	51.9	1039	10.39	1,4-DCB
57.11	9785	0.0	0	0.00	
57.96	435497	56.8	1135	11.35	1,2-DCB
58.83	4513	0.0	0	0.00	
59.42	1713	0.0	0	0.00	
59.61	2679	0.0	0	0.00	
60.02	3078	0.0	0	0.00	
60.35	1547	0.0	0	0.00	
60.57	1636	0.0	0	0.00	
60.79	919	0.0	0	0.00	
61.08	506	0.0	0	0.00	
61.28	105018	73.6	1472	14.72	1,2-DBr-3-CPA
61.97	1776	0.0	0	0.00	OK Spt Sup
62.21	659	0.0	0	0.00	
63.03	310	0.0	0	0.00	
63.19	702	0.0	0	0.00	
63.43	727	0.0	0	0.00	
63.74	615	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160605.17
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 07:24:51
 Printed : Jun 07, 1996 17:34:03

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
64.00	1472	0.0	0	0.00	
64.25	404505	57.3	1147	11.47	1,2,4-TCB
64.67	720680	75.2	1505	15.05 *	HEXACLBUTADIENE
65.45	7675	0.0	0	0.00	
65.82	426618	77.3	1546	15.46 <i>ok</i>	1,2,3-TCB
66.83	2356	0.0	0	0.00 <i>ok spk out</i>	
67.13	527	0.0	0	0.00	
67.34	321	0.0	0	0.00	

**out of $\pm 15\%$ range
 not required for days
 analysis*

10 Jun 96 LT

AB 14 Jun 96

VOLATILE STANDARDS PREPARATION LOG

STANDARD NAME: ESS 0419

PREPARATION DATE: 19 Apr 96

NO. OF VIALS: 14

PREPARED BY: UI

FINAL VOLUME: 25 ml

SOLVENT: MeOH

TYPE: External Surrogate

MIX/COMPOUND	SUPPLIER	DATE REC'D	LOT #	MIX CONC (ug/ml)	VOL USED (ul)	WEIGHT USED (g)	FINAL CONC (ug/ml)
1-Chloro-4-fluoro-benzene	Reckel	15 Feb 96	A006130	2500	4000	N/A	400
UI							

USE/COMMENTS: To be used in soil extraction for EPA method 8021

McKenzie Laboratories - EPA GC Volatiles

File: c:\ezchrom\data1\160603.09
 Method: c:\ezchrom\methods\lvoa0603.met
 Sample ID: 0.5 ppb 9
 Acquired: Jun 03, 1996 23:13:27
 Printed: Jun 04, 1996 16:20:23

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
6.50	2150	0.0	0	0.00	
6.71	1699	0.0	0	0.50	Vinyl Chloride
11.89	4730	0.0	0	0.00	
12.09	3092	0.0	0	0.50	1,1-dce
15.99	2242	0.0	0	0.50	Mtbe
16.67	7678	0.0	0	0.50	Trans 1,2-dce
24.61	6207	0.0	0	0.50	Cis 1,2-dce
28.84	4620	0.0	0	0.50	1,1-dcpe
30.38	14170	0.0	0	0.50	Benzene
31.66	1013472	0.0	0	1.00	Flbenzene (IS)
33.30	1308	0.0	0	0.00	
33.60	8335	0.0	0	0.50	Tce 0.0093ar
38.42	1574	0.0	0	0.50	Cis 1,3-dcpe
39.69	12947	0.0	0	0.50	Toluene 0.0144ar
40.76	2210	0.0	0	0.50	Trans 1,3-dcpe
42.49	5605	0.0	0	0.50	Pce
45.60	38683	0.0	0	5.00	1cl4fbz (surr)
46.15	12972	0.0	0	0.50	Chlorobenzene 0.0144ar
46.40	10827	0.0	0	0.50	Ethylbenzene 0.0120ar
46.72	25042	0.0	0	1.00	M/P Xylene
47.18	900664	0.0	0	1.00	1cl2flbz (IS)
48.57	10393	0.0	0	0.50	O Xylene
48.78	13418	0.0	0	0.50	Styrene
49.10	7578	0.0	0	0.00	
50.12	8470	0.0	0	0.50	Isopropylbenzene
51.27	5366	0.0	0	0.00	
51.82	8440	0.0	0	0.50	n-propylbenzene
51.97	14560	0.0	0	0.50	Bromobenzene
52.52	24610	0.0	0	1.00	1,3,5-tmb/2-cl tol
52.75	12285	0.0	0	0.50	4-cl toluene
53.99	7066	0.0	0	0.50	t-butylbenzene
54.15	12268	0.0	0	0.50	1,2,4-tmb
54.52	1582	0.0	0	0.00	
54.89	7928	0.0	0	0.50	s-butylbenzene
55.49	8225	0.0	0	0.50	p-isopropyltoluene
55.86	9444	0.0	0	0.50	1,3-dcb 0.0105ar
56.35	44098	0.0	0	0.50	1,4-dcb 0.04896ar
57.25	8717	0.0	0	0.50	n-butylbenzene
57.90	9740	0.0	0	0.50	1,2-dcb 0.0108ar
59.21	2187	0.0	0	0.00	
60.19	1503	0.0	0	0.00	
60.48	1442	0.0	0	0.00	
60.79	1641	0.0	0	0.00	
61.60	1150	0.0	0	0.00	
62.73	1611	0.0	0	0.00	

Continued...

File : c:\ezchrom\data\160603.09
Method : c:\ezchrom\methods\1voa0603.met
Sample ID : 0.5 ppb 9
Acquired : Jun 03, 1996 23:13:27
Printed : Jun 04, 1996 16:20:23

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
63.26	7907	0.0	0	0.00	
64.19	2543	0.0	0	0.50	1,2,4-tcb
64.61	1222	0.0	0	0.50	Hexachlorobutadiene
65.01	3945	0.0	0	0.50	Napthalene
65.60	1251	0.0	0	0.00	
65.75	1177	0.0	0	0.50	1,2,3-tcb
66.81	2034	0.0	0	0.00	
67.27	1204	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\data1\160603.09
Method : c:\ezchrom\methods\lvoa0603.met
Sample ID : 0.5 ppb 9
Acquired : Jun 03, 1996 23:13:27
Printed : Jun 04, 1996 16:20:23

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.16	1493	0.0	0	0.00	
5.72	3740	0.0	0	0.50	DCDFM 0.0065ar
6.48	12499	0.0	0	0.50	CHLOROMETHANE
6.79	15983	0.0	0	0.50	VINYL CHLORIDE 0.0276ar
7.63	858	0.0	0	0.00	
7.92	291	0.0	0	0.00	
8.23	218	0.0	0	0.50	BROMOMETHANE
8.60	8466	0.0	0	0.50	CHLOROETHANE
8.90	1119	0.0	0	0.00	
9.10	532	0.0	0	0.00	
9.49	12338	0.0	0	0.50	TCFM 0.0213ar
10.02	222	0.0	0	0.00	
11.34	7348	0.0	0	0.50	FREON 113
11.85	541	0.0	0	0.00	
12.20	11812	0.0	0	0.50	1,1-DCE 0.0204ar
12.99	1457	0.0	0	0.00	
15.05	181072	0.0	0	0.50	METH CHLORIDE
16.11	1242	0.0	0	0.00	
16.45	828	0.0	0	0.00	
16.74	7753	0.0	0	0.50	TRANS 1,2-DCE
17.17	769	0.0	0	0.00	
18.71	811	0.0	0	0.00	
19.27	902	0.0	0	0.00	
20.19	5462	0.0	0	0.50	1,1-DCA 0.0094ar
21.43	477	0.0	0	0.00	
22.35	1330	0.0	0	0.00	
23.27	613	0.0	0	0.00	
23.54	1657	0.0	0	0.00	
23.89	2025	0.0	0	0.00	
24.39	3234	0.0	0	0.50	2,2-DCPA
24.69	14880	0.0	0	0.50	CIS 1,2-DCE
25.71	20864	0.0	0	0.50	CHLOROFORM 0.0561ar
26.74	2621	0.0	0	0.50	BCM
27.02	669	0.0	0	0.00	
28.03	12251	0.0	0	0.50	1,1,1-TCA 0.0212ar
28.90	8638	0.0	0	0.50	1,1-DCPE
29.33	13409	0.0	0	0.50	CARBON TET 0.0232ar
29.78	695	0.0	0	0.00	
30.63	11125	0.0	0	0.50	1,2-DCA 0.0192ar
31.17	487	0.0	0	0.00	
31.73	12308	0.0	0	0.00	
32.22	398	0.0	0	0.00	
32.42	408	0.0	0	0.50	2-CL ETH VI ETH
32.88	888	0.0	0	0.00	
33.58	15624	0.0	0	0.50	TCE 0.0270ar

Continued...

File : c:\ezchrom\data\160603.09
 Method : c:\ezchrom\methods\lvoa0603.met
 Sample ID : 0.5 ppb 9
 Acquired : Jun 03, 1996 23:13:27
 Printed : Jun 04, 1996 16:20:23

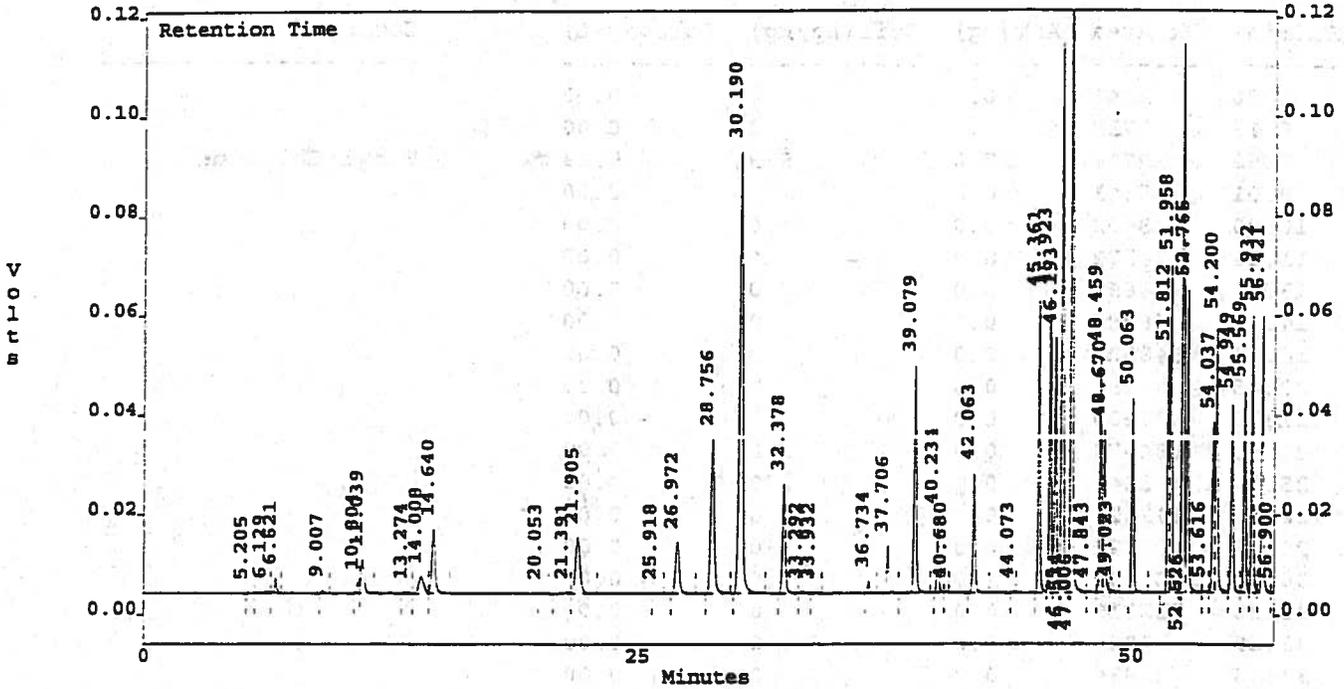
Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
34.09	1410	0.0	0	0.00	
34.69	14390	0.0	0	0.50	1,2-DCPA 0.0249ar
35.85	4302	0.0	0	0.50	BRDICLMETHANE 0.0074ar
36.04	1300	0.0	0	0.50	DIBROMOMETHANE
36.29	352	0.0	0	0.00	
38.48	5678	0.0	0	0.50	CIS 1,3-DCPE
40.84	3238	0.0	0	0.50	TRANS 1,3-DCPE
41.22	432	0.0	0	0.00	
41.47	10454	0.0	0	0.50	1,1,2-TCA 0.0181ar
41.81	1132	0.0	0	0.00	
42.22	418	0.0	0	0.00	
42.58	26646	0.0	0	1.00	1,3 DCPA/PCE
43.68	495	0.0	0	0.50	DIBRCLMETHANE 0.00086ar ✓
44.34	529	0.0	0	0.50	1,2-DBEA (EDB)
44.63	486	0.0	0	0.00	
45.67	32802	0.0	0	5.00	1CL4FBZ (SURR)
46.25	3701	0.0	0	0.50	CHLORO BENZENE
46.45	14481	0.0	0	0.50	1,1,1,2-PCA
47.23	578365	0.0	0	1.00	1CL2FBZ (IS)
48.38	3452	0.0	0	0.00	
49.01	868	0.0	0	0.00	
50.01	403	0.0	0	0.00	
50.52	422	0.0	0	0.50	BROMOFORM 0.00073ar ✓
50.79	296	0.0	0	0.00	
51.05	7290	0.0	0	0.50	1,1,2,2-PCA 0.0126ar
51.35	513	0.0	0	0.00	
51.70	4622	0.0	0	0.50	1,2,3-TCPA
52.20	886	0.0	0	0.50	BROMO BENZENE 0.0015 ar
52.60	3527	0.0	0	0.50	2-CL TOLUENE
52.84	3600	0.0	0	0.50	4-CL TOLUENE
53.11	945	0.0	0	0.00	
53.37	294	0.0	0	0.00	
55.93	5050	0.0	0	0.50	1,3-DCB 0.0087ar
56.44	6155	0.0	0	0.50	1,4-DCB 0.0106ar
56.73	619	0.0	0	0.00	
57.98	6512	0.0	0	0.50	1,2-DCB 0.0113 ar
58.60	691	0.0	0	0.00	
61.77	674	0.0	0	0.50	1,2-DBr-3-CPA
64.35	1320	0.0	0	0.50	1,2,4-TCB
64.67	1702	0.0	0	0.50	HEXACLEUTADIENE
64.89	1112	0.0	0	0.00	
65.31	558	0.0	0	0.00	
65.81	220	0.0	0	0.50	1,2,3-TCB

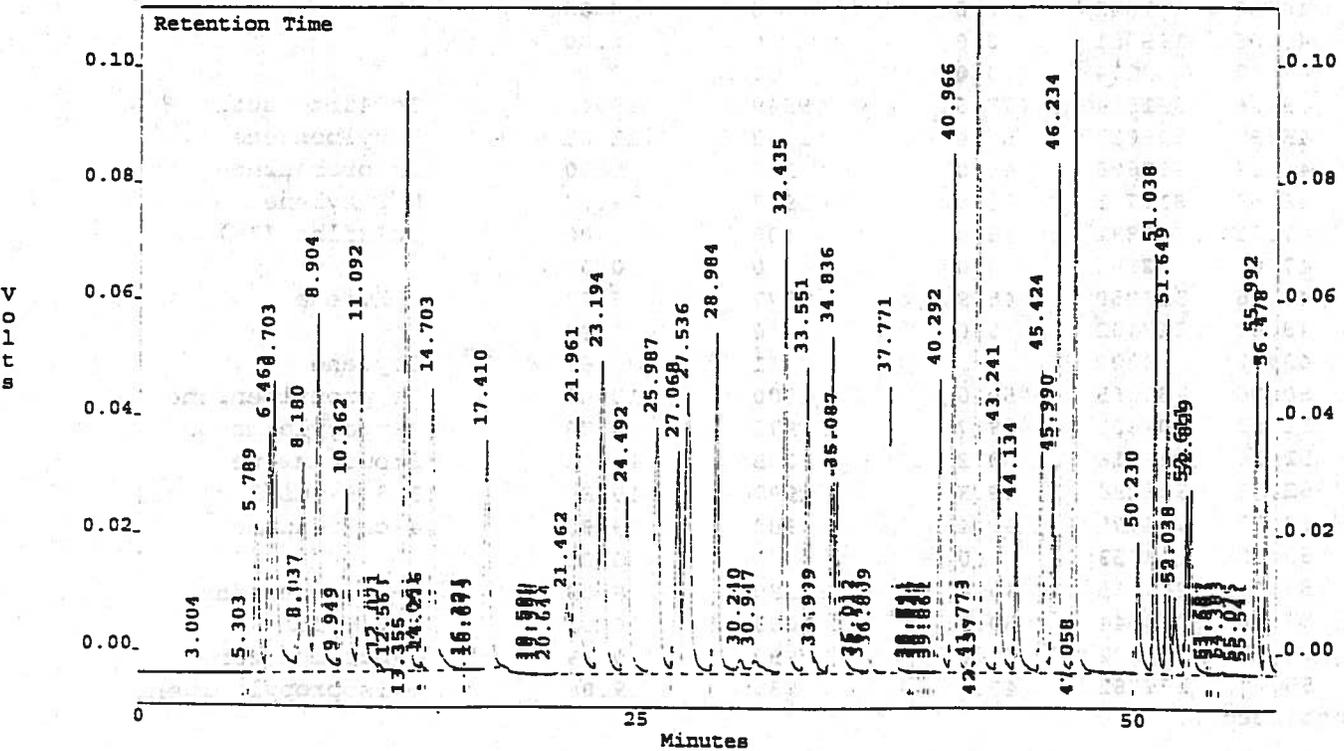
NO JUNE 4

McKenzie Laboratories - EPA GC Volatiles
 File : c:\ezchrom\chrom\160606.01
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CTL VOA 2
 Acquired : Jun 07, 1996 08:52:54
 Printed : Jun 10, 1996 09:24:23

c:\ezchrom\chrom\160606.01 -- Channel A



c:\ezchrom\chrom\160606.01 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.01
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : CTL VOA 2
 Acquired : Jun 07, 1996 08:52:54
 Printed : Jun 10, 1996 09:24:25

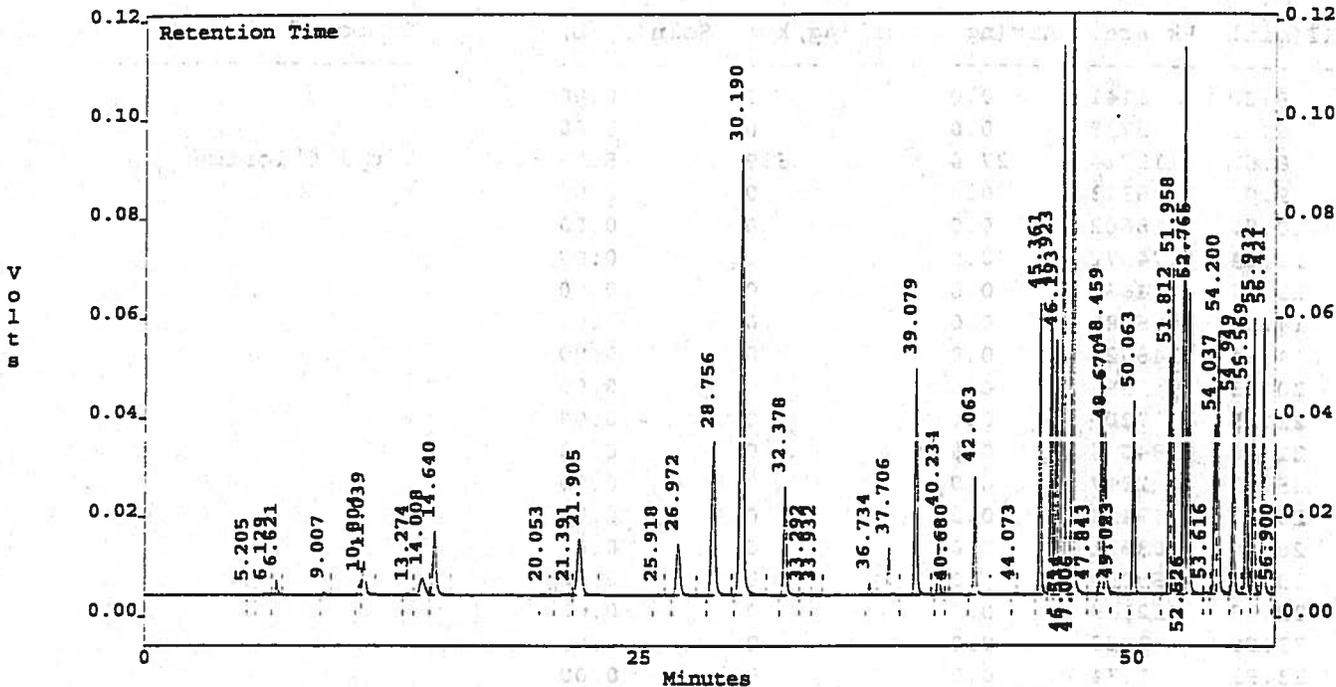
Channel A Results

RT(min)	Pk Area	Air(ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
5.20	1141	0.0	0	0.00	
6.13	5739	0.0	0	0.00	
6.62	19714	27.0	539	5.39 * #	Vinyl Chloride
9.01	5343	0.0	0	0.00	
10.80	18602	0.0	0	0.00	
11.04	74572	0.0	0	0.00	
13.27	4663	0.0	0	0.00	
14.01	66786	0.0	0	0.00	
14.64	148525	0.0	0	0.00	
20.05	1296	0.0	0	0.00	
21.39	7200	0.0	0	0.00	
21.90	184078	0.0	0	0.00	
25.92	2247	0.0	0	0.00	
26.97	143423	0.0	0	0.00	
28.76	403521	0.0	0	0.00	
30.19	1058099	0.0	0	0.00	
32.38	222318	0.0	0	0.00	
33.29	3885	0.0	0	0.00	
33.93	1834	0.0	0	0.00	
36.73	19579	0.0	0	0.00	
37.71	74949	0.0	0	0.00	
39.08	384074	0.0	0	0.00	
40.23	102655	0.0	0	0.00	
40.68	1642	0.0	0	0.00	
42.06	189881	0.0	0	0.00	
44.07	2274	0.0	0	0.00	
45.36	391534	477.5	9549	95.49	1cl4fbz (surr) 95
45.92	399013	55.4	1108	11.08	Ethylbenzene
46.19	369686	45.0	900	9.00	Chlorobenzene
46.53	812711	98.9	1977	19.77	M/P Xylene
47.01	1075831	5.0	100	1.00	1cl2flbz (IS)
47.84	2196	0.0	0	0.00	
48.46	333050	48.9	977	9.77	O Xylene
48.67	218402	0.0	0	0.00	
49.02	6200	3.1	61	0.61 <i>of CHIC</i>	Styrene
50.06	288065	50.0	1000	10.00	Isopropylbenzene
51.81	304603	48.7	975	9.75	n-propylbenzene
51.96	439816	50.2	1005	10.05	Bromobenzene
52.53	826284	99.3	1987	19.87	1,3,5-tmb/2-cl tol
52.77	394478	49.4	988	9.88	4-cl toluene
53.62	3953	0.0	0	0.00	
54.04	244465	49.4	989	9.89	t-butylbenzene
54.20	378644	50.2	1003	10.03	1,2,4-tmb
54.95	278122	50.0	999	9.99	s-butylbenzene
55.57	275782	49.4	988	9.88	p-isopropyltoluene

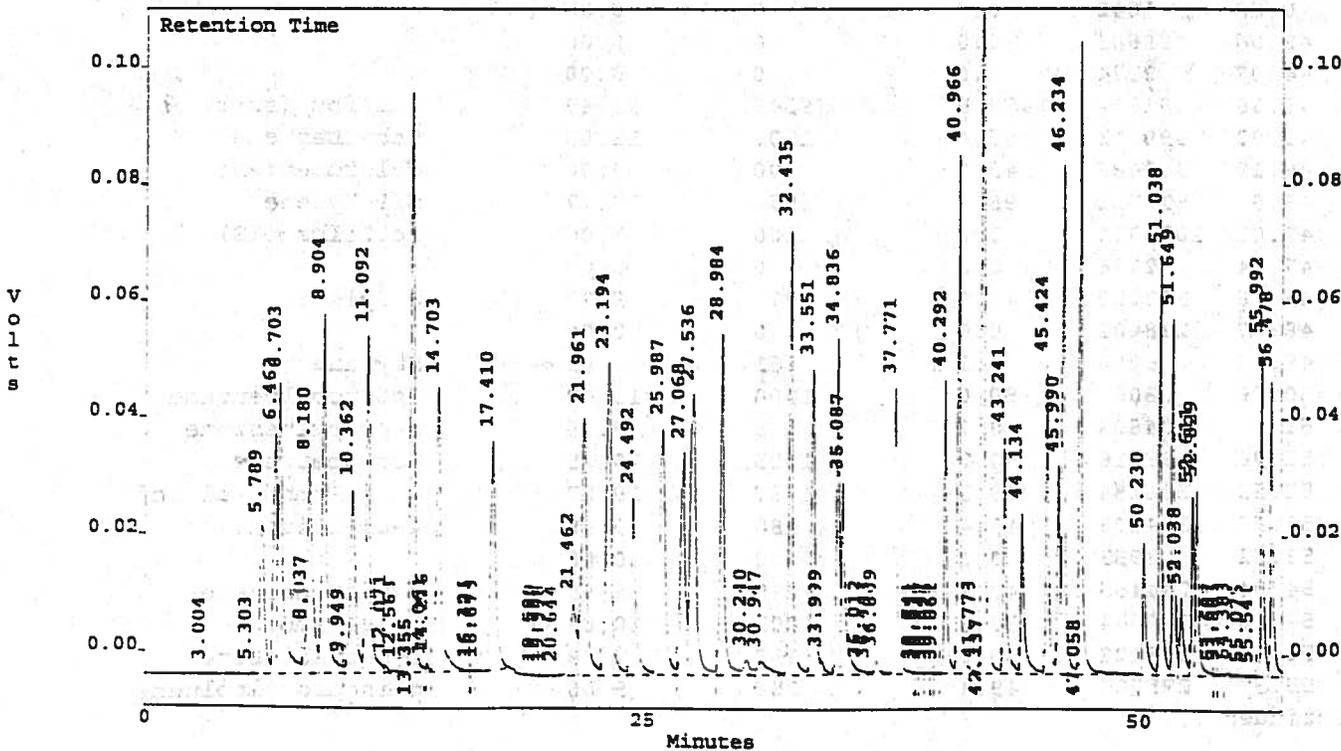
Continued...

McKenzie Laboratories - EPA GC Volatiles
 File : c:\ezchrom\chrom\160606.01
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CTL VOA 2
 Acquired : Jun 07, 1996 08:52:54
 Printed : Jun 10, 1996 09:24:23

c:\ezchrom\chrom\160606.01 -- Channel A



c:\ezchrom\chrom\160606.01 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.01
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : CTL VOA 2
 Acquired : Jun 07, 1996 08:52:54
 Printed : Jun 10, 1996 09:24:25

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
5.20	1141	0.0	0	0.00	
6.13	5739	0.0	0	0.00	
6.62	19714	27.0	539	5.39 * #	Vinyl Chloride
9.01	5343	0.0	0	0.00	
10.80	18602	0.0	0	0.00	
11.04	74572	0.0	0	0.00	
13.27	4663	0.0	0	0.00	
14.01	66786	0.0	0	0.00	
14.64	148525	0.0	0	0.00	
20.05	1296	0.0	0	0.00	
21.39	7200	0.0	0	0.00	
21.90	184078	0.0	0	0.00	
25.92	2247	0.0	0	0.00	
26.97	143423	0.0	0	0.00	
28.76	403521	0.0	0	0.00	
30.19	1058099	0.0	0	0.00	
32.38	222318	0.0	0	0.00	
33.29	3885	0.0	0	0.00	
33.93	1834	0.0	0	0.00	
36.73	19579	0.0	0	0.00	
37.71	74949	0.0	0	0.00	
39.08	384074	0.0	0	0.00	
40.23	102655	0.0	0	0.00	
40.68	1642	0.0	0	0.00	
42.06	189881	0.0	0	0.00	
44.07	2274	0.0	0	0.00	
45.36	391534	477.5	9549	95.49	1cl4fbz (surr) 95
45.92	399013	55.4	1108	11.08	Ethylbenzene
46.19	369686	45.0	900	9.00	Chlorobenzene
46.53	812711	98.9	1977	19.77	M/P Xylene
47.01	1075831	5.0	100	1.00	1cl2flbz (IS)
47.84	2196	0.0	0	0.00	
48.46	333050	48.9	977	9.77	O Xylene
48.67	218402	0.0	0	0.00	
49.02	6200	3.1	61	0.61 <i>of CHC</i>	Styrene
50.06	288065	50.0	1000	10.00	Isopropylbenzene
51.81	304603	48.7	975	9.75	n-propylbenzene
51.96	439816	50.2	1005	10.05	Bromobenzene
52.53	826284	99.3	1987	19.87	1,3,5-tmb/2-cl tol
52.77	394478	49.4	988	9.88	4-cl toluene
53.62	3953	0.0	0	0.00	
54.04	244465	49.4	989	9.89	t-butylbenzene
54.20	378644	50.2	1003	10.03	1,2,4-tmb
54.95	278122	50.0	999	9.99	s-butylbenzene
55.57	275782	49.4	988	9.88	p-isopropyltoluene

Continued...

File : c:\ezchrom\chrom\160606.01
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CTL VOA 2
 Acquired : Jun 07, 1996 08:52:54
 Printed : Jun 10, 1996 09:24:25

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
55.93	348581	50.4	1008	10.08	1,3-dcb
56.42	347147	50.3	1006	10.06	1,4-dcb
56.90	2352	0.0	0	0.00	
57.34	296292	50.1	1001	10.01	n-butylbenzene
57.99	289843	51.8	1037	10.37	1,2-dcb
58.65	1969	0.0	0	0.00	
59.08	1212	0.0	0	0.00	
59.29	2388	0.0	0	0.00	
59.70	2189	0.0	0	0.00	
63.34	2388	0.0	0	0.00	
64.28	212973	59.6	1191	11.91 o c H	1,2,4-tcb
64.70	166496	61.8	1235	12.35 * * * *	Hexachlorobutadiene
65.10	330626	72.4	1449	14.49 * * * *	Napthalene
65.85	222411	69.8	1395	13.95 * * * *	1,2,3-tcb
67.31	1825	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.01
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : CTL VOA 2
 Acquired : Jun 07, 1996 08:52:54
 Printed : Jun 10, 1996 09:24:25

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
3.00	290	0.0	0	0.00	
5.30	1178	0.0	0	0.00	
5.79	414987	53.8	1076	10.76	DCDFM
6.46	448285	47.7	953	9.53	CHLOROMETHANE
6.70	805529	69.7	1395	13.95 * *	VINYL CHLORIDE
8.04	49216	24.7	493	4.93 * *	BROMOMETHANE
8.18	622909	54.6	1091	10.91	CHLOROETHANE
8.90	934558	62.1	1242	12.42 ok C H K	TCFM
9.95	8936	0.0	0	0.00	
10.36	570362	0.0	0	0.00	
11.09	817485	0.0	0	0.00	
12.07	15934	0.0	0	0.00	
12.56	7348	0.0	0	0.00	
13.36	1356244	0.0	0	0.00	
14.06	5132	0.0	0	0.00	
14.22	10719	0.0	0	0.00 ok C H K	METH CHLORIDE
14.70	748671	0.0	0	0.00	
16.33	524	0.0	0	0.00	
16.42	906	0.0	0	0.00	
16.67	717	0.0	0	0.00	
17.41	711221	0.0	0	0.00	
19.59	509	0.0	0	0.00	
19.80	251	0.0	0	0.00	
20.00	316	0.0	0	0.00	
20.64	1541	0.0	0	0.00	
21.46	260046	17.4	348	3.48 *	CHLOROFORM
21.96	849923	0.0	0	0.00	
23.19	1021821	76.2	1523	15.23 ok p/d	CIS 1,2-DCE
24.49	500646	34.7	693	6.93 * *	1,1,1-TCA
25.99	873746	89.7	1794	17.94 ok C H K	1,1-DCPE
27.07	562700	0.0	0	0.00	
27.54	1016734	0.0	0	0.00	
28.98	769719	0.0	0	0.00	
30.24	65210	0.0	0	0.00	
30.95	98794	0.0	0	0.00	
32.43	881219	0.0	0	0.00	
33.55	636362	0.0	0	0.00	
34.00	38301	3.2	63	0.63 * *	1,2-DCPA
34.84	543824	0.0	0	0.00	
35.09	469221	0.0	0	0.00	
36.01	13153	0.0	0	0.00	
36.44	5913	0.0	0	0.00	
36.81	36974	0.0	0	0.00	
37.77	522790	0.0	0	0.00	
38.74	1211	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160606.01
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CTL VOA 2
 Acquired : Jun 07, 1996 08:52:54
 Printed : Jun 10, 1996 09:24:25

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
38.87	965	0.0	0	0.00	
39.04	1618	0.0	0	0.00	
39.35	811	0.0	0	0.00	
39.57	311	0.0	0	0.00	
39.86	998	0.0	0	0.00	
40.29	449204	0.0	0	0.00	
40.97	845783	0.0	0	0.00	
41.78	4123	0.0	0	0.00	
42.14	1696100	0.0	0	0.00	
43.24	443083	58.5	1170	11.70 <i>ok CHK</i>	DIBRCLMETHANE
44.13	330190	70.5	1409	14.09 <i>✓</i>	1,2-DEEA (EDB)
45.42	487242	485.0	9699	96.99	1CL4FBZ (SURR) 9 7
45.99	288973	18.1	362	3.62 <i>* * * *</i>	1,1,1,2-PCA
46.23	871426	159.5	3191	31.91 <i>ok pi'd</i>	CHLORO BENZENE
47.06	1064598	5.0	100	1.00	1CL2FBZ (IS)
50.23	254723	80.2	1603	16.03 <i>* * *</i>	BROMOFORM
51.04	609471	71.5	1430	14.30 <i>* *</i>	1,1,2,2-PCA
51.65	523328	72.3	1445	14.45 <i>ok CHK</i>	1,2,3-TCPA
52.04	170325	47.2	944	9.44	BROMO BENZENE
52.61	256753	49.9	997	9.97	2-CL TOLUENE
52.83	313569	48.5	971	9.71	4-CL TOLUENE
53.69	3636	0.0	0	0.00	
53.89	5382	0.0	0	0.00	
54.38	12325	0.0	0	0.00	
55.08	4123	0.0	0	0.00	
55.54	1229	0.0	0	0.00	
55.99	448686	52.7	1055	10.55	1,3-DCB
56.48	454481	49.8	995	9.95	1,4-DCB
58.06	448412	55.0	1100	11.00	1,2-DCB
58.84	4186	0.0	0	0.00	
59.08	2696	0.0	0	0.00	
59.34	4324	0.0	0	0.00	
59.68	1652	0.0	0	0.00	
59.95	540	0.0	0	0.00	
60.14	1919	0.0	0	0.00	
60.46	543	0.0	0	0.00	
60.74	2077	0.0	0	0.00	
61.12	412	0.0	0	0.00	
61.40	92619	62.7	1253	12.53 <i>* * * *</i>	1,2-DBr-3-CPA
62.40	6806	0.0	0	0.00	
62.78	2013	0.0	0	0.00	
63.07	967	0.0	0	0.00	
63.53	1497	0.0	0	0.00	
63.70	402	0.0	0	0.00	
63.87	459	0.0	0	0.00	
64.06	3159	0.0	0	0.00	
64.34	390450	52.4	1049	10.49	1,2,4-TCB

continued...

File : c:\ezchrom\chrom\160606.01
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : CTL VOA 2
 Acquired : Jun 07, 1996 08:52:54
 Printed : Jun 10, 1996 09:24:26

Channel B Results

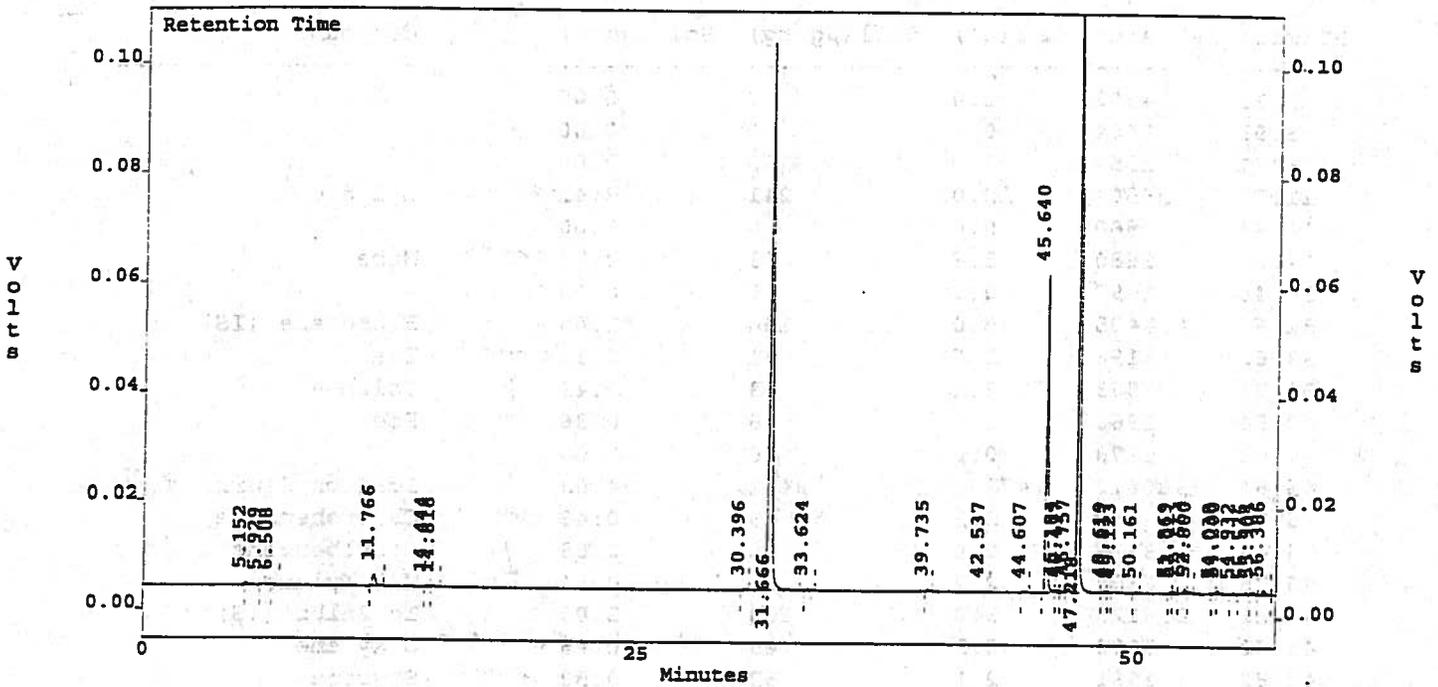
RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
64.77	696857	68.6	1372	13.72 ***	HEXACHLOROCYCLOHEPTADIENE
65.91	443906	75.6	1512	15.12 ***	1,2,3-TCB
66.94	2126	0.0	0	0.00	
67.23	451	0.0	0	0.00	
67.41	250	0.0	0	0.00	

Handwritten notes:
 @ 17 Jun 96
 * out of ± 15% range ok matrix spike
 ** out of ± 15% range okay in MSD
 *** out of ± 15% range
 *** non method for the days analysis
 17 Jun 96
 19 Jun 96
 19 Jun 96

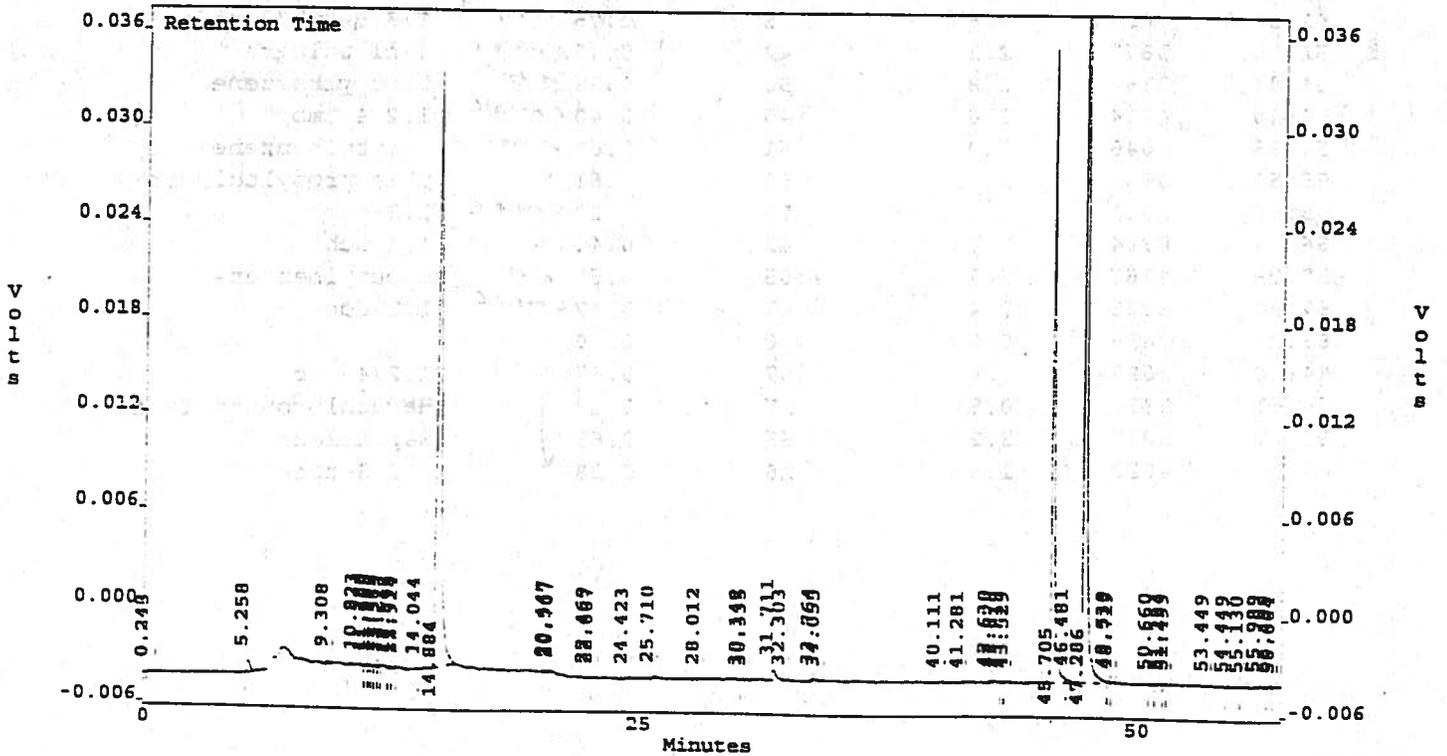
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.02
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : MTHD BLKW 3
 Acquired : Jun 07, 1996 10:08:31
 Printed : Jun 10, 1996 09:24:39

c:\ezchrom\chrom\160606.02 -- Channel A



c:\ezchrom\chrom\160606.02 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.02
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : MTHD BLKw . 3
 Acquired : Jun 07, 1996 10:08:31
 Printed : Jun 10, 1996 09:24:42

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.15	4902	0.0	0	0.00	
5.93	1434	0.0	0	0.00	
6.51	1557	0.0	0	0.00	
11.77	25504	12.0	241	2.41 <i>n C</i>	1,1-dce
14.44	2580	0.0	0	0.00	
14.82	1680	3.6	73	0.73 <i>c m a c</i>	Mtbe
30.40	1497	0.0	0	0.00	
31.67	1054405	5.0	100	1.00	Flbenzene (IS)
33.62	3196	1.6	31	0.31 <i>c m a c</i>	Tce
39.73	3063	2.1	43	0.43 ↓	Toluene
42.54	1966	1.8	36	0.36 ↓	Pce
44.61	1378	0.0	0	0.00	
45.64	380810	473.1	9462	94.62	1,1,4,4-tet (surr) 9 S
46.18	4259	2.2	45	0.45 <i>c m a c</i>	Chlorobenzene
46.44	3236	0.4	8	0.08 ↓	Ethylbenzene
46.76	6508	2.7	54	0.54 ↓	M/P Xylene
47.22	1056123	5.0	100	1.00	1,1,2,2-tet (IS)
48.62	3092	2.3	45	0.45 <i>c m a c</i>	O Xylene
48.82	1961	2.6	52	0.52 <i>n m</i>	Styrene
49.12	2675	0.0	0	0.00	
50.16	1847	1.8	36	0.36 <i>c m a c</i>	Isopropylbenzene
51.87	2387	2.4	49	0.49 ↓	n-propylbenzene
52.02	3237	2.1	41	0.41 ↓	Bromobenzene
52.56	7623	3.8	75	0.75 <i>n m</i>	1,3,5-tmb/2-cl tol
52.80	3879	2.1	42	0.42 <i>c m a c</i>	4-cl toluene
54.04	2390	2.8	56	0.56 <i>n m</i>	t-butylbenzene
54.20	4714	2.0	40	0.40 <i>c m a c</i>	1,2,4-tmb
54.93	3046	3.0	61	0.61 <i>n m</i>	s-butylbenzene
55.54	3652	3.0	61	0.61 ↓	p-isopropyltoluene
55.90	3911	1.4	27	0.27 <i>c m a c</i>	1,3-dcb
56.39	8794	2.1	42	0.42 ↓	1,4-dcb
57.29	4382	2.7	55	0.55 <i>n m</i>	n-butylbenzene
57.94	6085	2.4	47	0.47 <i>c m a c</i>	1,2-dcb
63.27	2436	0.0	0	0.00	
64.20	2693	3.4	67	0.67 <i>n m</i>	1,2,4-tcb
64.61	2316	0.8	17	0.17 ↓	Hexachlorobutadiene
65.01	5037	3.2	65	0.65 ↓	Napthalene
65.76	4022	1.4	28	0.28 ↓	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.02
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : MTHD BLKw 3
 Acquired : Jun 07, 1996 10:08:31
 Printed : Jun 10, 1996 09:24:42

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
0.24	1025	0.0	0	0.00	
5.26	9449	0.0	0	0.00	
9.31	2702	2.8	57	0.57 <i>CAR</i>	TCFM
10.82	2314	4.8	96	0.96 <i>CMA</i>	FREON 113
11.28	924	0.0	0	0.00	
11.48	688	0.0	0	0.00	
11.56	585	0.0	0	0.00	
11.78	836	2.8	56	0.56 <i>CAR</i>	1,1-DCE
11.98	685	0.0	0	0.00	
12.22	2324	0.0	0	0.00	
12.55	824	0.0	0	0.00	
12.79	1321	0.0	0	0.00	
12.91	2558	0.0	0	0.00	
14.04	396	0.0	0	0.00	
14.88	518594	27.7	554	✓ 5.54	METH CHLORIDE
20.45	1942	0.0	0	0.00	
20.57	1337	0.0	0	0.00	
20.71	1398	0.0	0	0.00	
22.47	459	0.0	0	0.00	
22.67	573	2.6	53	0.53 <i>AM</i>	2,2-DCE
24.42	915	1.7	34	0.34 <i>CMA</i>	CHLOROFORM
25.71	1309	0.0	0	0.00	
28.01	729	0.0	0	0.00	
30.14	323	0.0	0	0.00	
30.33	247	0.0	0	0.00	
31.71	12042	11.8	236	2.36 <i>FB</i>	2-CL ETH VI ETH
32.30	783	0.0	0	0.00	
33.76	3472	0.0	0	0.00	
34.06	812	0.2	4	0.04 <i>CMA</i>	1,2-DCE
40.11	475	0.0	0	0.00	
41.28	308	3.0	60	0.60 <i>CAR</i>	1,1,2-TCA
42.63	1705	0.0	0	0.00	
42.88	1504	0.0	0	0.00	
43.22	432	0.0	0	0.00	
43.53	580	5.9	119	1.19 <i>pk 54P</i>	DIBROMOMETHANE
45.71	344679	486.2	9723	97.23	1,1,1-TFBZ (SURRE) 97
46.48	3835	0.0	0	0.00	
47.29	751107	5.0	100	1.00	1,1,2-TFBZ (IS)
48.54	936	0.0	0	0.00	
48.72	408	0.0	0	0.00	
50.66	548	0.0	0	0.00	
51.16	1091	0.0	0	0.00	
51.29	344	0.0	0	0.00	
51.50	304	4.2	85	0.85 <i>AM</i>	1,2,3-TCPA
53.45	462	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160606.02
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : MTHD BLKw 3
 Acquired : Jun 07, 1996 10:08:31
 Printed : Jun 10, 1996 09:24:42

Channel B Results

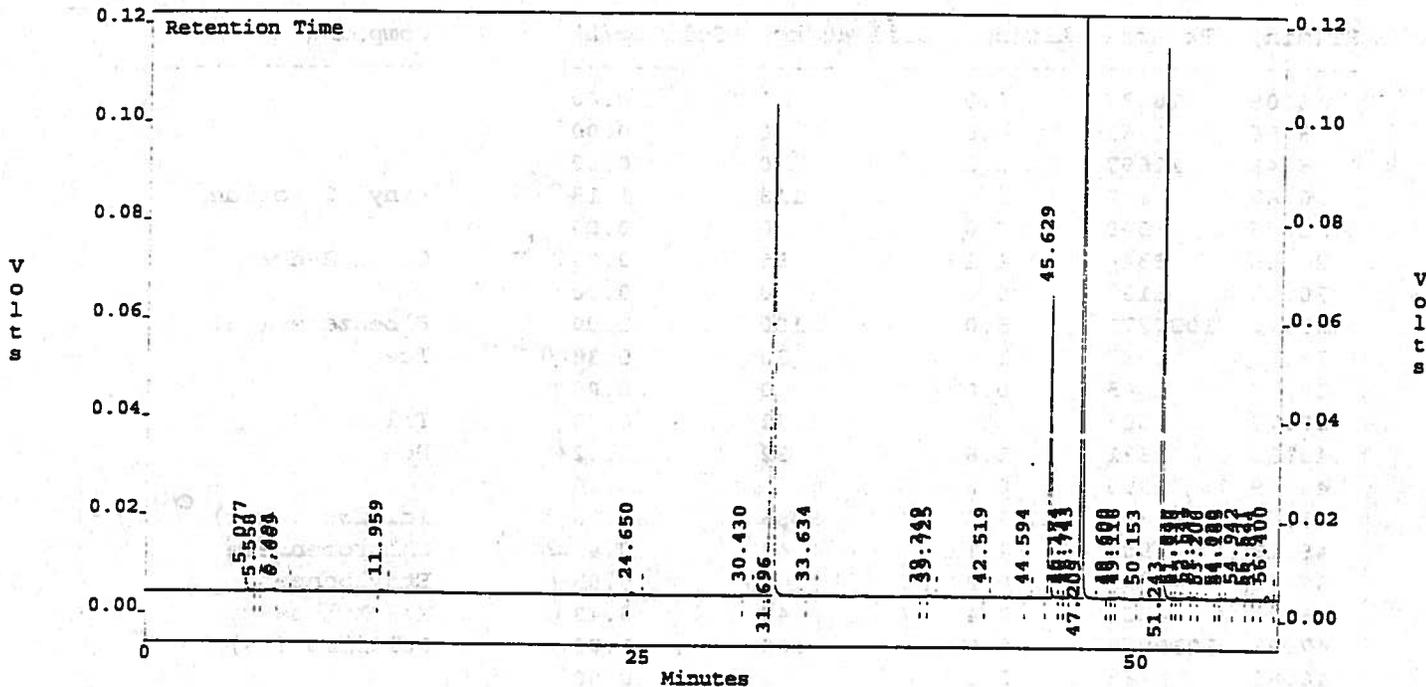
RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
54.45	627	0.0	0	0.00	
55.13	387	0.0	0	0.00	
55.99	1403	2.7	54	0.54 <i>n c</i>	1,3-DCB
56.50	1323	3.8	75	0.75 <i>n c</i>	1,4-DCB
56.66	429	0.0	0	0.00	
58.03	2835	3.8	76	0.76 <i>n c</i>	1,2-DCB
58.32	547	0.0	0	0.00	
61.84	306	0.0	0	0.00	
62.85	1107	0.0	0	0.00	
64.29	3123	5.5	110	1.10 <i>n m</i>	1,2,4-TCB
64.66	5735	3.6	72	0.72 ↓	HEXAChL BUTADIENE
65.00	1069	0.0	0	0.00	
65.29	1750	0.0	0	0.00	
65.85	1052	1.8	36	0.36 <i>n m</i>	1,2,3-TCB

*DCM contamination, no waters
 run today
~~see gener~~ (E) U
 17 Jun 96 U*

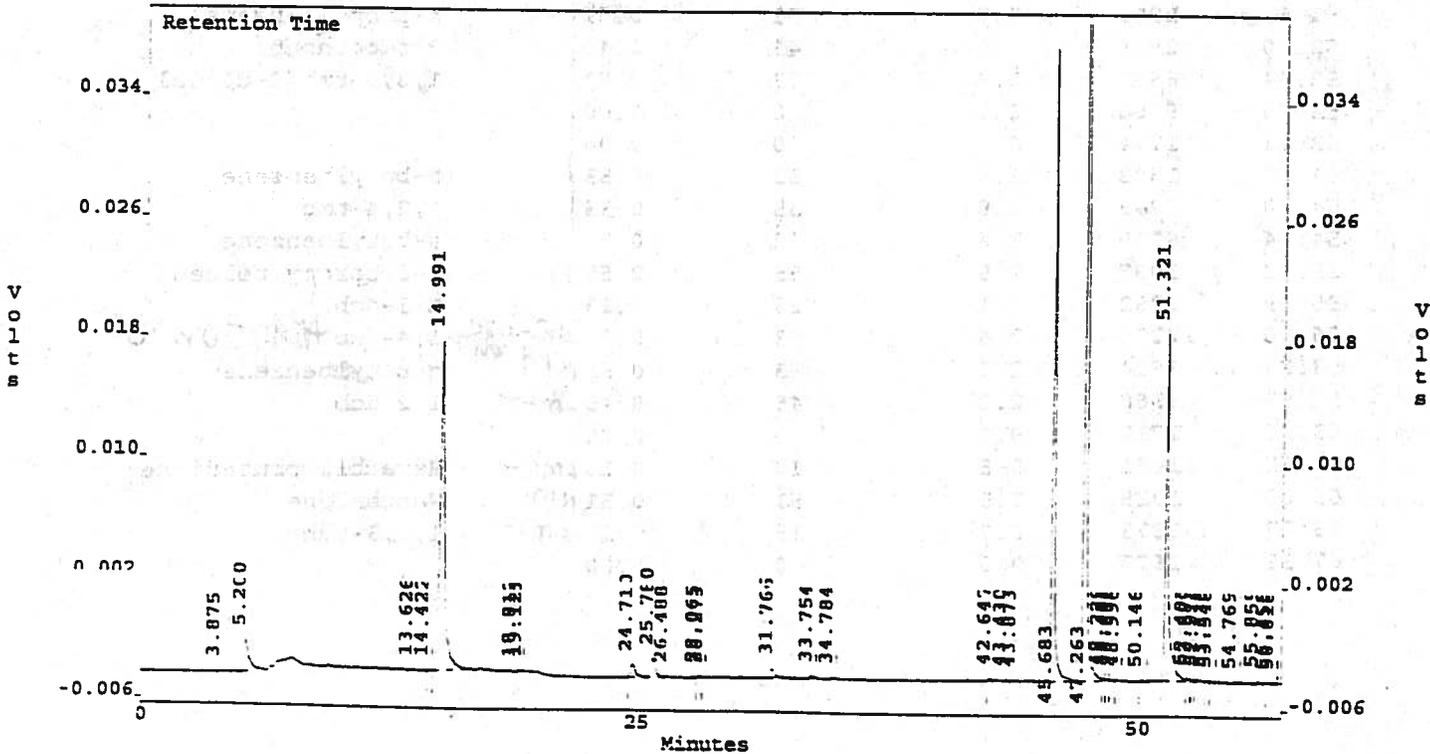
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.03
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5052s 4
 Acquired : Jun 07, 1996 11:35:28
 Printed : Jun 10, 1996 09:24:55

c:\ezchrom\chrom\160606.03 -- Channel A



c:\ezchrom\chrom\160606.03 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.03
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5052a 4
 Acquired : Jun 07, 1996 11:35:28
 Printed : Jun 10, 1996 09:24:57

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln (µg/L)	Compound
5.08	18837	0.0	0	0.00	
5.56	1761	0.0	0	0.00	
6.49	11697	0.0	0	0.00	
6.67	2852	5.9	118	1.18 <i>NC</i>	Vinyl Chloride
11.96	6348	0.0	0	0.00	
24.65	8346	4.2	85	0.85 <i>NC</i>	Cis 1,2-dce
30.43	1135	0.0	0	0.00	
31.70	1037271	5.0	100	1.00	Flbenzene (IS)
33.63	2967	1.5	30	0.30 <i>µMCL</i>	Tce
39.35	1345	0.0	0	0.00	
39.72	2603	2.1	42	0.42	Toluene
42.52	1331	1.6	32	0.32	Pce
44.59	1395	0.0	0	0.00	
45.63	390898	493.3	9866	98.66	1cl4fbz (surr) <i>99.1%</i>
46.17	2902	2.1	42	0.42 <i>µMCL</i>	Chlorobenzene
46.43	2091	0.2	5	0.05	Ethylbenzene
46.74	4320	2.4	49	0.49	M/P Xylene
47.21	1039068	5.0	100	1.00	1cl2flbz (IS)
48.60	1462	0.0	0	0.00	
48.81	1726	0.0	0	0.00	
49.12	4363	2.9	58	0.58 <i>NM</i>	Styrene
50.15	1247	1.7	34	0.34 <i>µMCL</i>	Isopropylbenzene
51.24	700202	0.0	0	0.00	
51.85	2983	2.5	51	0.51	n-propylbenzene
52.00	2888	2.0	41	0.41	Bromobenzene
52.54	6621	3.7	73	0.73	1,3,5-tmb/2-cl tol
52.85	6768	0.0	0	0.00	
53.21	1774	0.0	0	0.00	
54.02	1552	2.6	53	0.53	t-butylbenzene
54.18	2748	1.8	35	0.35	1,2,4-tmb
54.94	6015	3.6	72	0.72	s-butylbenzene
55.52	2097	2.8	55	0.55	p-isopropyltoluene
55.89	2262	1.1	23	0.23	1,3-dcb
56.40	12232	2.6	53	0.53 <i>µMCL</i>	1,4-dcb <i>AB 17 Jun 96</i>
57.27	3914	2.7	53	0.53 <i>NM</i>	n-butylbenzene
57.93	5368	2.2	45	0.45 <i>µMCL</i>	1,2-dcb
63.30	1712	0.0	0	0.00	
64.62	1451	0.5	10	0.10 <i>µMCL</i>	Hexachlorobutadiene
65.03	1825	2.5	51	0.51 <i>NM</i>	Napthalene
65.77	1873	0.7	15	0.15 <i>µMCL</i>	1,2,3-tcb
67.33	1677	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.03
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5052s 4
 Acquired : Jun 07, 1996 11:35:28
 Printed : Jun 10, 1996 09:24:57

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
3.88	361	0.0	0	0.00	
5.20	34747	0.0	0	0.00	
13.63	679	0.0	0	0.00	
14.42	446	0.0	0	0.00	
17.22	351270	✓ 17.2	280 * ✓	357	3.57 METH CHLORIDE
18.81	259	0.0	0	0.00	
19.12	615	0.0	0	0.00	
24.71	14859	3.1	61	0.61	pkshp CHLOROFORM
25.78	18208	8.9	177	1.77	m BCM
26.49	982	0.0	0	0.00	
28.07	1049	0.0	0	0.00	
28.27	427	1.9	38	0.38	cmL CARBON TET
31.77	8951	10.7	215	2.15	FB 2-CL ETH VI ETH
33.75	2026	2.2	45	0.45	cmL TCE
34.78	938	0.0	0	0.00	
42.65	1485	1.1	21	0.21	1,3 DCPA/PCE
43.43	650	6.0	119	1.19	cmL by AR DIBRCLMETHANE
43.87	969	0.0	0	0.00	AR 17 JUN 96
45.68	354140	552.0	11040	110.40	1CL4FBZ (SURR) 110 %
47.26	672390	5.0	100	1.00	1CL2FBZ (IS)
48.23	1374	0.0	0	0.00	
48.48	1300	0.0	0	0.00	
48.63	1547	0.0	0	0.00	
49.00	941	0.0	0	0.00	
50.15	679	3.5	71	0.71	cmL by AR 17 JUN 96 BROMOFORM
51.32	232656	0.0	0	0.00	
52.40	2166	0.0	0	0.00	
52.59	1134	3.7	73	0.73	NC 2-CL TOLUENE
52.91	3120	0.0	0	0.00	
53.34	663	0.0	0	0.00	
53.55	733	0.0	0	0.00	
54.77	1071	0.0	0	0.00	
55.86	2148	2.8	57	0.57	NC 1,3-DCB
56.45	563	3.7	73	0.73	cmL by AR 1,4-DCB
56.57	572	0.0	0	0.00	
58.02	2627	3.8	76	0.76	NC 1,2-DCB
58.79	445	0.0	0	0.00	
59.32	747	0.0	0	0.00	
61.25	919	10.7	215	2.15	NM 1,2-DBr-3-CPA
63.36	603	0.0	0	0.00	
64.41	2776	5.5	110	1.10	NM 1,2,4-TCB
64.69	1447	3.0	61	0.61	HEXACLBUTADIENE
64.84	1141	0.0	0	0.00	
65.03	1603	0.0	0	0.00	
66.07	1535	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160606.03
Method : c:\ezchrom\chrom\1voa0606.met
Sample ID : 5052s 4
Acquired : Jun 07, 1996 11:35:28
Printed : Jun 10, 1996 09:24:58

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
66.45	559	0.0	0	0.00	

* Possible ~~lab~~ contamination.

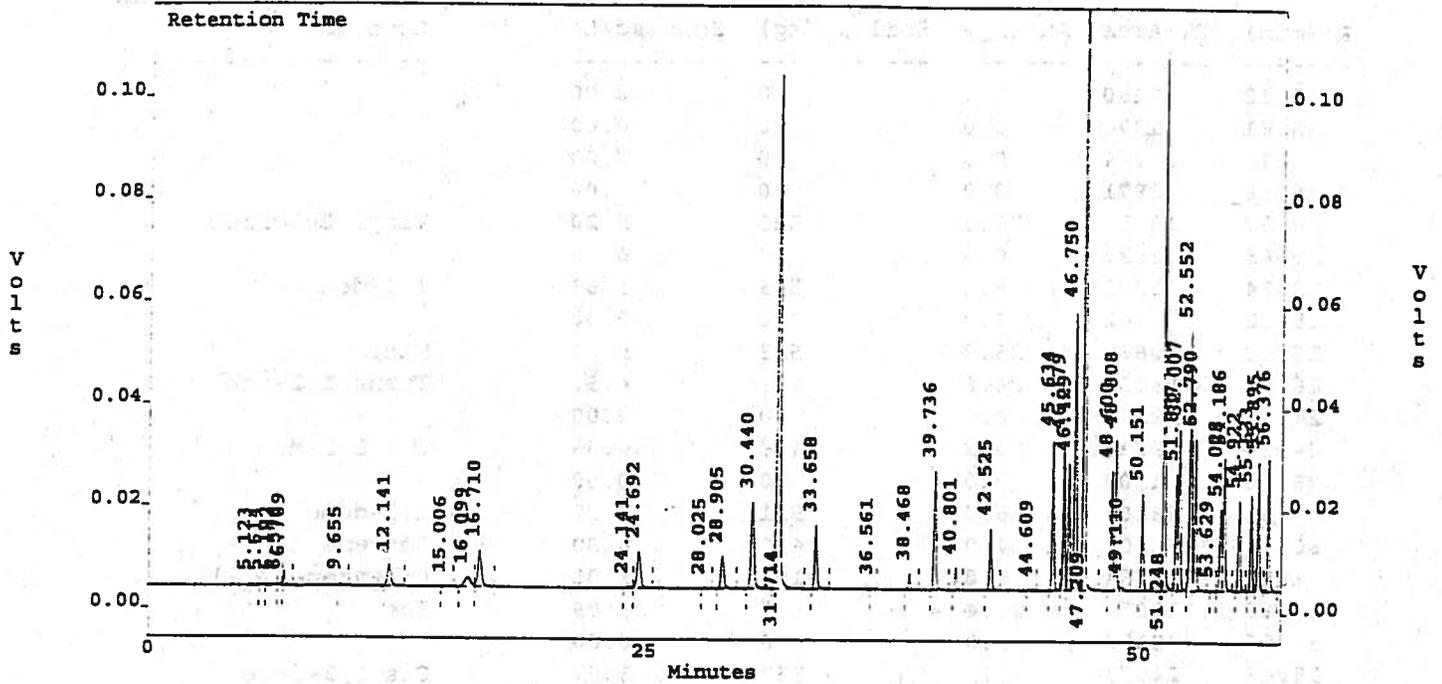
UI 12 Jun 96

YB 17 Jun 96

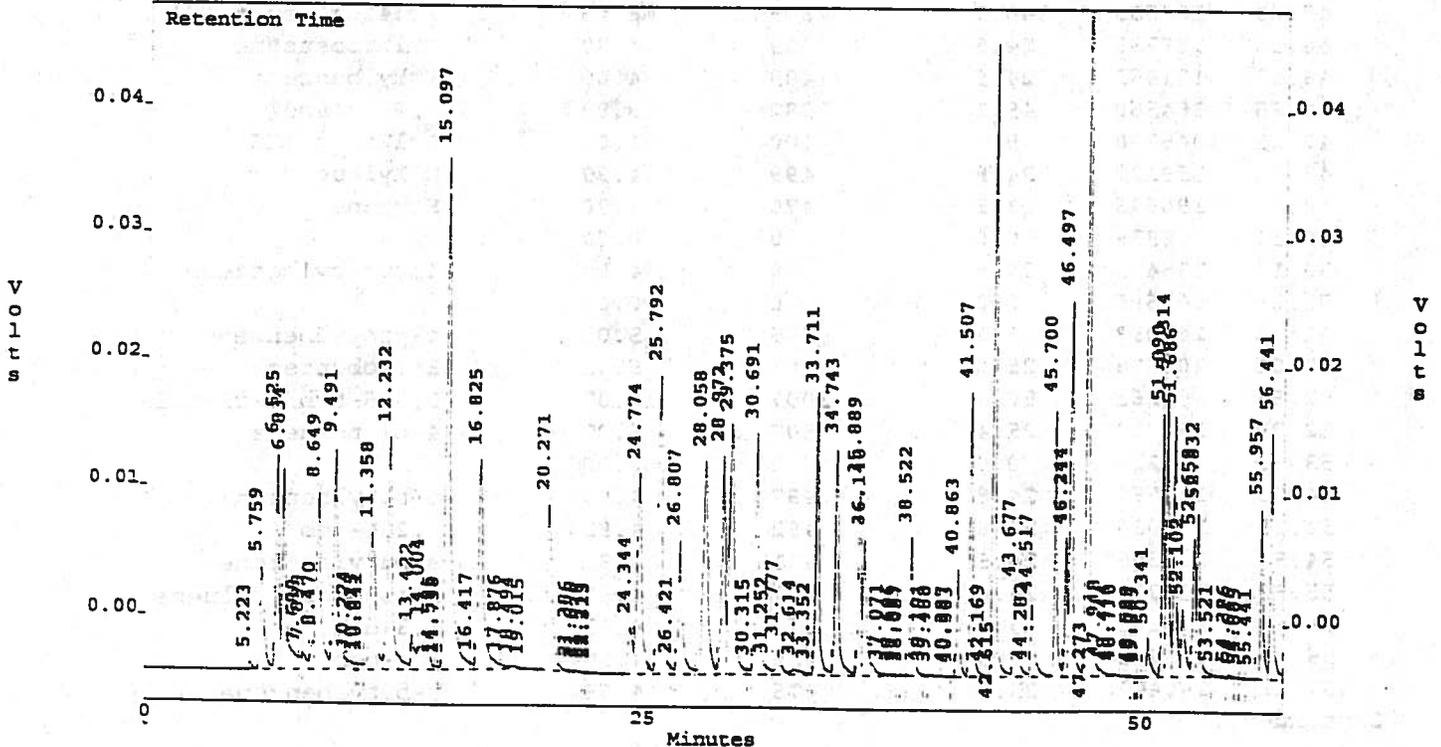
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.04
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5053s S 5
 Acquired : Jun 07, 1996 13:03:52
 Printed : Jun 10, 1996 09:25:18

c:\ezchrom\chrom\160606.04 -- Channel A



c:\ezchrom\chrom\160606.04 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.04
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5053a S 5
 Acquired : Jun 07, 1996 13:03:52
 Printed : Jun 10, 1996 09:25:20

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.12	2250	0.0	0	0.00	
5.61	1374	0.0	0	0.00	
6.19	5264	0.0	0	0.00	
6.58	3971	0.0	0	0.00	
6.77	18434	26.0	520	5.20	Vinyl Chloride
9.65	3537	0.0	0	0.00	
12.14	55353	28.1	563	5.63	1,1-dce
15.01	1842	0.0	0	0.00	
16.10	40868	26.6	533	5.33	Mtbe
16.71	94336	24.6	492	4.92	Trans 1,2-dce
24.14	3574	0.0	0	0.00	
24.69	89638	24.3	486	4.86	Cis 1,2-dce
28.03	1308	0.0	0	0.00	
28.91	73106	26.0	521	5.21	1,1-dcpe
30.44	190307	✓24.0 376	480	4.80	Benzene
31.71	1045068	5.0	100	1.00	Flbenzene (IS)
33.66	110977	25.4	509	5.09	Tce
36.56	2199	0.0	0	0.00	
38.47	24453	17.9	357	3.57	Cis 1,3-dcpe
39.74	182356	✓24.5 354	490	4.90	Toluene
40.80	27473	15.9	317	3.17	Trans 1,3-dcpe
42.53	89220	✓24.8 359	497	4.97	Pce
44.61	1999	0.0	0	0.00	
45.63	188533	240.3	4805	48.05	1cl4fbz (surr) 96. / .
46.18	188735	24.5	489	4.89	Chlorobenzene
46.43	171462	24.5	489	4.89	Ethylbenzene
46.75	384560	49.1	982	9.82	M/P Xylene
47.21	1045798	5.0	100	1.00	1cl2flbz (IS)
48.60	159127	24.9	499	4.99	O Xylene
48.81	190676	23.5	470	4.70	Styrene
49.11	8855	0.0	0	0.00	
50.15	135405	24.9	499	4.99	Isopropylbenzene
51.25	665696	0.0	0	0.00	
51.86	147098	25.3	505	5.05	n-propylbenzene
52.01	205618	25.0	501	5.01	Bromobenzene
52.55	395261	50.3	1007	10.07	1,3,5-tmb/2-cl tol
52.79	190713	25.4	507	5.07	4-cl toluene
53.63	1216	0.0	0	0.00	
54.03	113552	24.8	497	4.97	t-butylbenzene
54.19	175034	24.6	492	4.92	1,2,4-tmb
54.92	125506	24.5	491	4.91	s-butylbenzene
55.53	125287	24.4	487	4.87	p-isopropyltoluene
55.90	156103	23.7	473	4.73	1,3-dcb
56.38	163252	24.8	495	4.95	1,4-dcb
57.28	130447	23.8	475	4.75	n-butylbenzene

Continued...

File : c:\ezchrom\chrom\160606.04
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5053s S 5
 Acquired : Jun 07, 1996 13:03:52
 Printed : Jun 10, 1996 09:25:21

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
57.93	133997	✓25.3	306	506	1,2-dcb
59.21	2267	0.0	0	0.00	
63.27	3178	0.0	0	0.00	
64.18	74885	23.2	464	4.64	1,2,4-tcb
64.61	58903	22.5	449	4.49	Hexachlorobutadiene
65.01	100474	24.1	482	4.82	Napthalene
65.75	60338	19.6	391	3.91	1,2,3-tcb
67.24	2613	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.04
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5053s S 5
 Acquired : Jun 07, 1996 13:03:52
 Printed : Jun 10, 1996 09:25:21

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
5.22	6409	0.0	0	0.00	
5.76	106878	20.0	401	4.01	DCDFM
6.52	179875	25.9	518	5.18	CHLOROMETHANE
6.83	221474	24.9	497	4.97	VINYL CHLORIDE
7.69	10128	0.0	0	0.00	
7.90	20933	0.0	0	0.00	
8.47	27074	19.7	395	3.95	BROMOMETHANE
8.65	220704	25.8	516	5.16	CHLOROETHANE
9.49	259264	23.4	467	4.67	TCFM
10.22	13919	0.0	0	0.00	
10.62	3286	0.0	0	0.00	
10.84	5819	0.0	0	0.00	
11.36	213844	28.3	565	5.65	FREON 113
12.23	302012	✓27.6 433	552	5.52	1,1-DCE
13.42	34842	0.0	0	0.00	
14.00	86348	0.0	0	0.00	
14.58	2266	0.0	0	0.00	
14.74	1998	0.0	0	0.00	
15.10	689947	35.2	704	7.04	METH CHLORIDE
16.42	5465	0.0	0	0.00	
16.82	294090	29.5	589	5.89	TRANS 1,2-DCE
17.88	7246	0.0	0	0.00	
18.49	6111	0.0	0	0.00	
19.01	558	0.0	0	0.00	
20.27	252639	27.1	542	5.42	1,1-DCA
21.39	1863	0.0	0	0.00	
21.67	1392	0.0	0	0.00	
21.98	235	0.0	0	0.00	
22.21	716	0.0	0	0.00	
22.32	650	0.0	0	0.00	
24.34	62015	14.3	287	2.87	2,2-DCPA
24.77	261141	25.6	511	5.11	CIS 1,2-DCE
25.79	341561	27.6	553	5.53	CHLOROFORM
26.42	5764	0.0	0	0.00	
26.81	150471	26.0	521	5.21	BCM
28.06	298402	✓26.8 420	537	5.37	1,1,1-TCA
28.97	219239	28.6	571	5.71	1,1-DCPE
29.37	356044	27.4	548	5.48	CARBON TET
30.31	4831	0.0	0	0.00	
30.69	226145	23.8	477	4.77	1,2-DCA
31.25	7002	0.0	0	0.00	
31.78	33088	0.0	0	0.00	
32.61	15248	12.6	251	2.51	2-CL ETH VI ETH
33.35	2203	0.0	0	0.00	
33.71	262688	22.1 740	442	4.42	TCE

Continued...

File : c:\ezchrom\chrom\160606.04
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5053s S 5
 Acquired : Jun 07, 1996 13:03:52
 Printed : Jun 10, 1996 09:25:21

Channel B Results

RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
34.74	227465	22.9	459	4.59	1,2-DCPA
35.89	144651	20.5	410	4.10	BRDCLMETHANE
36.14	150408	26.9	538	5.38	DIBROMOMETHANE
37.07	3643	0.0	0	0.00	
37.70	2619	0.0	0	0.00	
37.89	971	0.0	0	0.00	
38.06	1041	0.0	0	0.00	
38.52	111673	17.8	357	3.57	CIS 1,3-DCPE
39.19	1296	0.0	0	0.00	
39.49	1162	0.0	0	0.00	
40.39	574	0.0	0	0.00	
40.56	253	0.0	0	0.00	
40.86	75278	14.7	294	2.94	TRANS 1,3-DCPE
41.51	222418	25.0	500	5.00	1,1,2-TCA
42.17	2450	0.0	0	0.00	
42.62	504310	48.8	976	9.76	1,3 DCPA/PCE
43.68	87049	18.9	377	3.77	DIBRCLMETHANE
44.28	2058	0.0	0	0.00	
44.52	79162	25.4	508	5.08	1,2-DBEA (EDB)
45.70	180744	247.9	4958	49.58	1CL4FBZ (SURR) 99.1/
46.24	81802	22.4	448	4.48	CHLOROBENZENE
46.50	308417	24.4	489	4.89	1,1,1,2-PCA
47.27	846252	5.0	100	1.00	1CL2FBZ (IS)
47.95	8913	0.0	0	0.00	
48.44	1069	0.0	0	0.00	
48.71	1934	0.0	0	0.00	
49.59	541	0.0	0	0.00	
49.76	405	0.0	0	0.00	
49.86	390	0.0	0	0.00	
50.34	41319	19.8	397	3.97	BROMOFORM
51.09	164861	27.6	553	5.53	1,1,2,2-PCA
51.31	217040	0.0	0	0.00	
51.69	197270	36.5	730	7.30	1,2,3-TCPA
52.10	68070	26.4	529	5.29	BROMOBENZENE
52.66	97071	25.5	509	5.09	2-CL TOLUENE
52.83	131476	27.1	543	5.43	4-CL TOLUENE
53.52	1356	0.0	0	0.00	
54.39	2869	0.0	0	0.00	
54.65	807	0.0	0	0.00	
54.89	596	0.0	0	0.00	
55.44	1109	0.0	0	0.00	
55.96	123574	19.9	398	3.98	1,3-DCB
56.44	173482	25.8	515	5.15	1,4-DCB
57.04	8143	0.0	0	0.00	
57.99	162996	27.0	539	5.39	1,2-DCB
58.58	3402	0.0	0	0.00	
58.87	1521	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160606.04
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5053s S 5
 Acquired : Jun 07, 1996 13:03:52
 Printed : Jun 10, 1996 09:25:21

Channel B Results

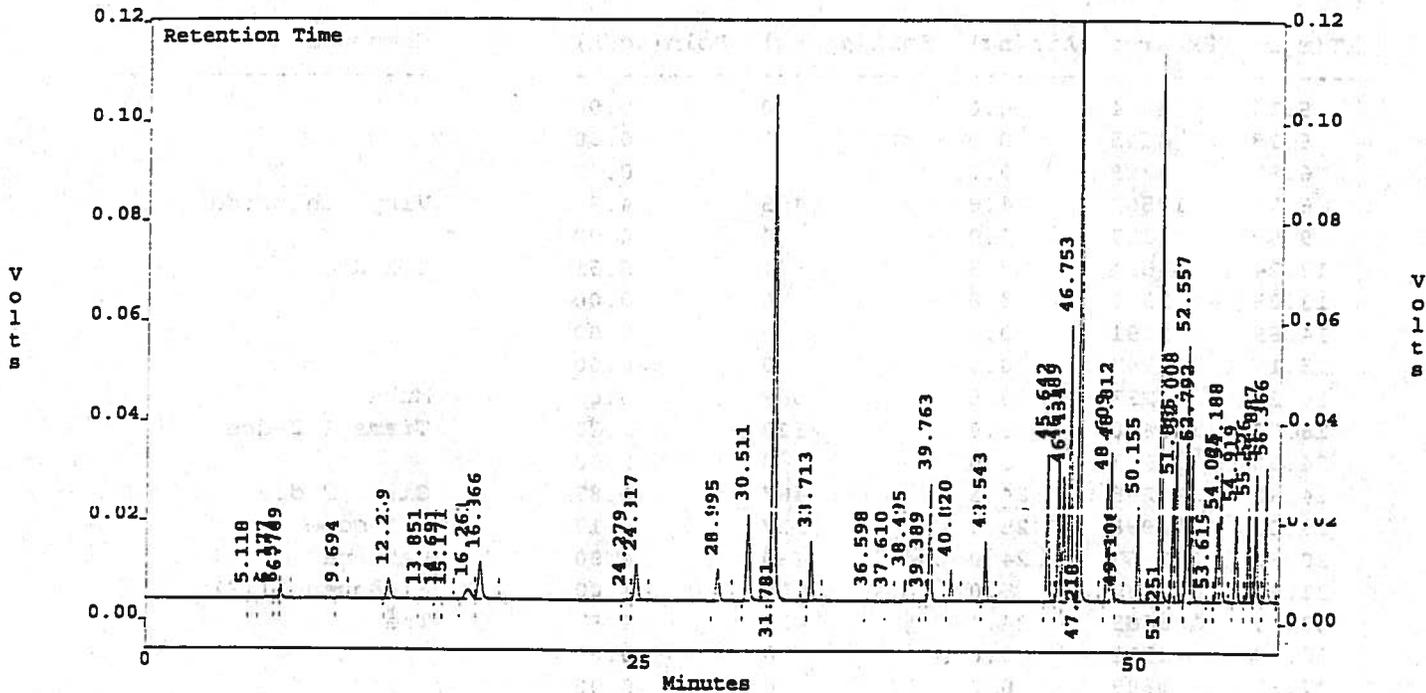
RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
59.14	677	0.0	0	0.00	
59.29	732	0.0	0	0.00	
59.47	1133	0.0	0	0.00	
59.67	1069	0.0	0	0.00	
60.05	493	0.0	0	0.00	
60.67	2176	0.0	0	0.00	
61.29	14062	20.0	400	4.00	1,2-DBr-3-CPA
61.67	1545	0.0	0	0.00	
61.96	2094	0.0	0	0.00	
62.50	1202	0.0	0	0.00	
63.96	690	0.0	0	0.00	
64.25	106726	21.3	426	4.26	1,2,4-TCB
64.66	216925	28.6	572	5.72	HEXACHLOROCYCLOHEPTADIENE
65.81	101197	22.8	456	4.56	1,2,3-TCB
66.87	1693	0.0	0	0.00	
67.35	937	0.0	0	0.00	

UI 12 Jun 96
 16 17 Jun 96

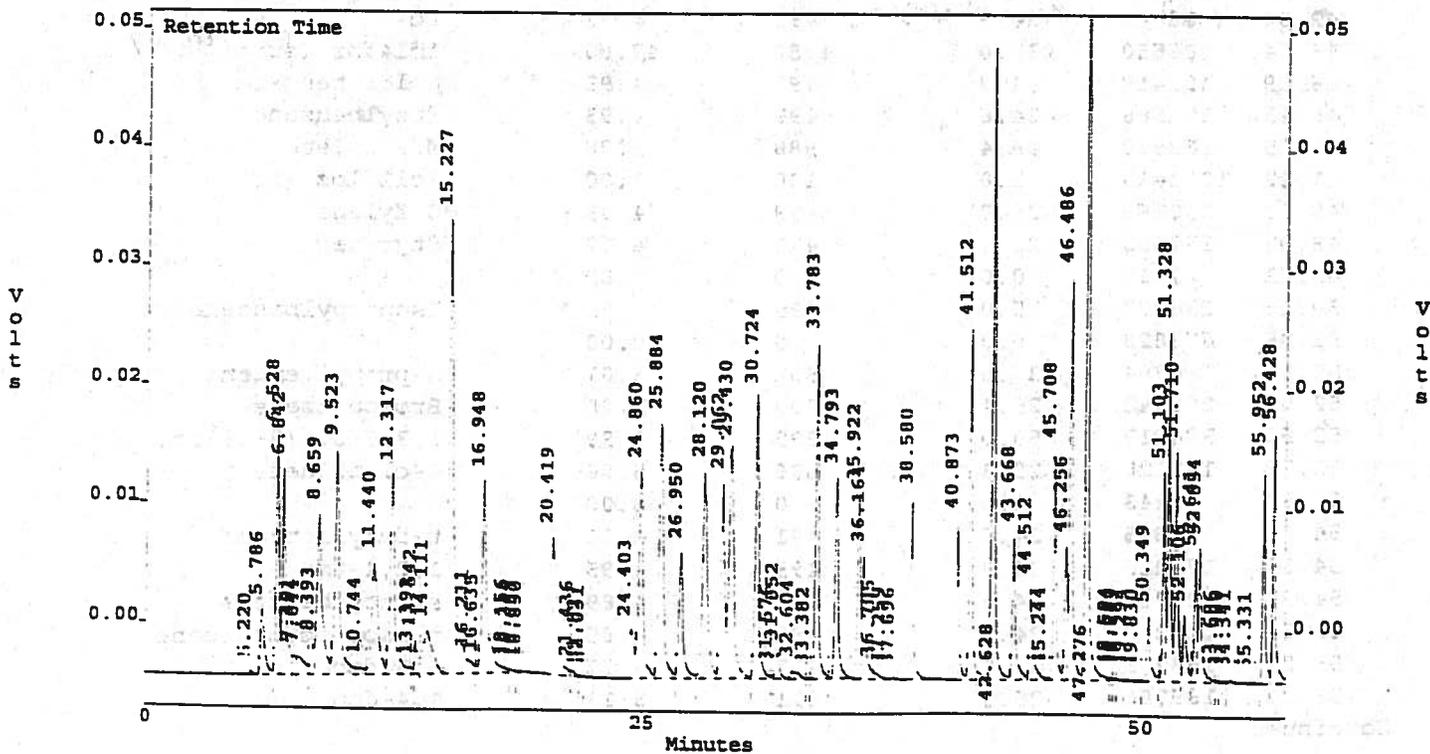
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.05
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5054s SD 6
 Acquired : Jun 07, 1996 14:38:02
 Printed : Jun 10, 1996 09:25:41

c:\ezchrom\chrom\160606.05 -- Channel A



c:\ezchrom\chrom\160606.05 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.05
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5054s SD 6
 Acquired : Jun 07, 1996 14:38:02
 Printed : Jun 10, 1996 09:25:43

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln (µg/L)	Compound
5.12	1444	0.0	0	0.00	
6.18	4645	0.0	0	0.00	
6.57	4369	0.0	0	0.00	
6.77	17562	24.8	495	4.95	Vinyl Chloride
9.69	3187	0.0	0	0.00	
12.24	54531	27.5	551	5.51	1,1-dce
13.85	1310	0.0	0	0.00	
14.69	1191	0.0	0	0.00	
15.17	1997	0.0	0	0.00	
16.26	44233	28.5	569	5.69	Mtbe
16.87	100600	26.0	520	5.20	Trans 1,2-dce
24.28	3663	0.0	0	0.00	
24.82	90268	24.3	487	4.87	Cis 1,2-dce
29.00	72998	25.9	517	5.17	1,1-dcpe
30.51	191357	✓ 24.0	480	4.80	Benzene
31.78	1047330	5.0	100	1.00	Flbenzene (IS)
33.71	106665	24.4	487	4.87	Tce
36.60	2511	0.0	0	0.00	
37.61	1389	0.0	0	0.00	
38.49	33300	23.0	459	4.59	Cis 1,3-dcpe
39.39	1145	0.0	0	0.00	
39.76	183539	✓ 24.5	491	4.91	Toluene
40.82	40041	21.3	426	4.26	Trans 1,3-dcpe
42.54	88849	✓ 24.6	492	4.92	Pce
45.64	188530	239.0	4780	47.80	1cl4fbz (surr) 96. /
46.19	191419	24.7	493	4.93	Chlorobenzene
46.43	173586	24.6	493	4.93	Ethylbenzene
46.75	388938	49.4	988	9.88	M/P Xylene
47.22	1051435	5.0	100	1.00	1cl2flbz (IS)
48.61	160169	25.0	499	4.99	O Xylene
48.81	192653	23.6	472	4.72	Styrene
49.11	7816	0.0	0	0.00	
50.15	136197	25.0	499	4.99	Isopropylbenzene
51.25	673828	0.0	0	0.00	
51.86	146564	25.0	501	5.01	n-propylbenzene
52.01	209942	25.4	508	5.08	Bromobenzene
52.56	394217	50.0	999	9.99	1,3,5-tmb/2-cl tol
52.79	191128	25.3	506	5.06	4-cl toluene
53.62	1443	0.0	0	0.00	
54.03	112815	24.6	491	4.91	t-butylbenzene
54.19	177228	24.8	495	4.95	1,2,4-tmb
54.92	125784	24.5	489	4.89	s-butylbenzene
55.53	125210	24.2	485	4.85	p-isopropyltoluene
55.89	158201	23.8	477	4.77	1,3-dcb
56.37	169784	25.6	511	5.11	1,4-dcb

Continued...

file : c:\ezchrom\chrom\160606.05
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5054s SD 6
 Acquired : Jun 07, 1996 14:38:02
 Printed : Jun 10, 1996 09:25:43

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
37.70	1699	0.0	0	0.00	
38.58	143180	22.7	454	4.54	CIS 1,3-DCPE
40.87	110527	20.3	407	4.07	TRANS 1,3-DCPE
41.51	281958	32.6	652	6.52	1,1,2-TCA
42.63	534177	54.7	1094	10.94	1,3 DCPA/PCE
43.67	129453	26.4	527	5.27	DIBRCLMETHANE
44.51	89568	29.3	585	5.85	1,2-DBEA (EDB)
45.24	2306	0.0	0	0.00	
45.71	173895	251.9	5038	50.38	1CL4FBZ (SURR) 101 /.
46.26	89303	25.3	505	5.05	CHLOROENZENE
46.49	339836	28.6	572	5.72	1,1,1,2-PCA
47.28	798610	5.0	100	1.00	1CL2FBZ (IS)
48.50	1814	0.0	0	0.00	
48.70	1343	0.0	0	0.00	
48.84	809	0.0	0	0.00	
49.29	963	0.0	0	0.00	
49.83	638	0.0	0	0.00	
50.35	62854	29.8	596	5.96	BROMOFORM
51.10	146265	26.3	526	5.26	1,1,2,2-PCA
51.33	246098	0.0	0	0.00	
51.71	187041	36.6	733	7.33	1,2,3-TCPA
52.11	67485	27.5	550	5.50	BROMOENZENE
52.64	83711	23.6	471	4.71	2-CL TOLUENE
52.85	114679	25.3	507	5.07	4-CL TOLUENE
53.69	1010	0.0	0	0.00	
53.98	2425	0.0	0	0.00	
54.34	2214	0.0	0	0.00	
55.33	755	0.0	0	0.00	
55.95	149282	24.8	495	4.95	1,3-DCB
56.43	191087	29.5	589	5.89	1,4-DCB
57.97	168652	29.2	585	5.85	1,2-DCB
58.54	4821	0.0	0	0.00	
59.00	1744	0.0	0	0.00	
61.31	18632	24.1	481	4.81	1,2-DBr-3-CPA
63.37	848	0.0	0	0.00	
64.25	123179	24.9	499	4.99	1,2,4-TCB
64.67	206435	28.8	576	5.76	HEXACL BUTADIENE
65.43	3775	0.0	0	0.00	
65.81	120455	28.3	567	5.67	1,2,3-TCB
66.61	1201	0.0	0	0.00	
66.93	506	0.0	0	0.00	
67.26	429	0.0	0	0.00	

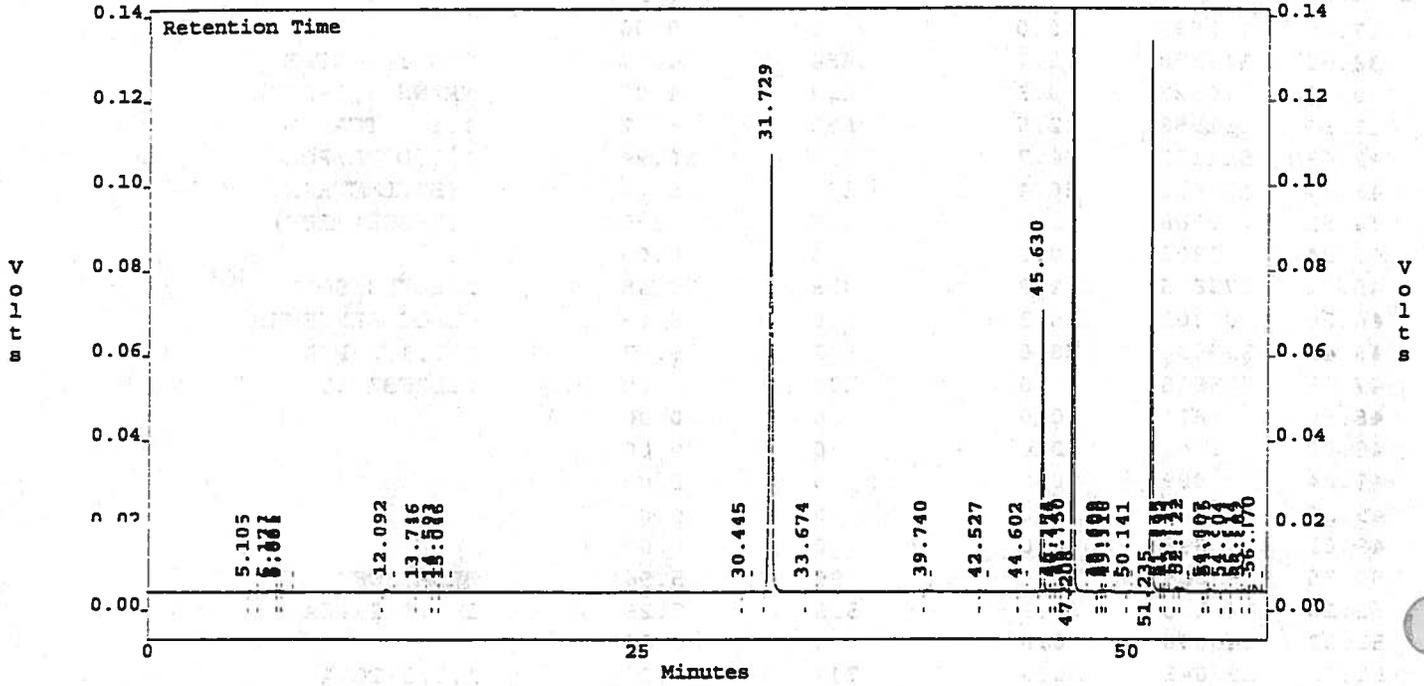
UI 12 Jun 96

46/17 Jun 96

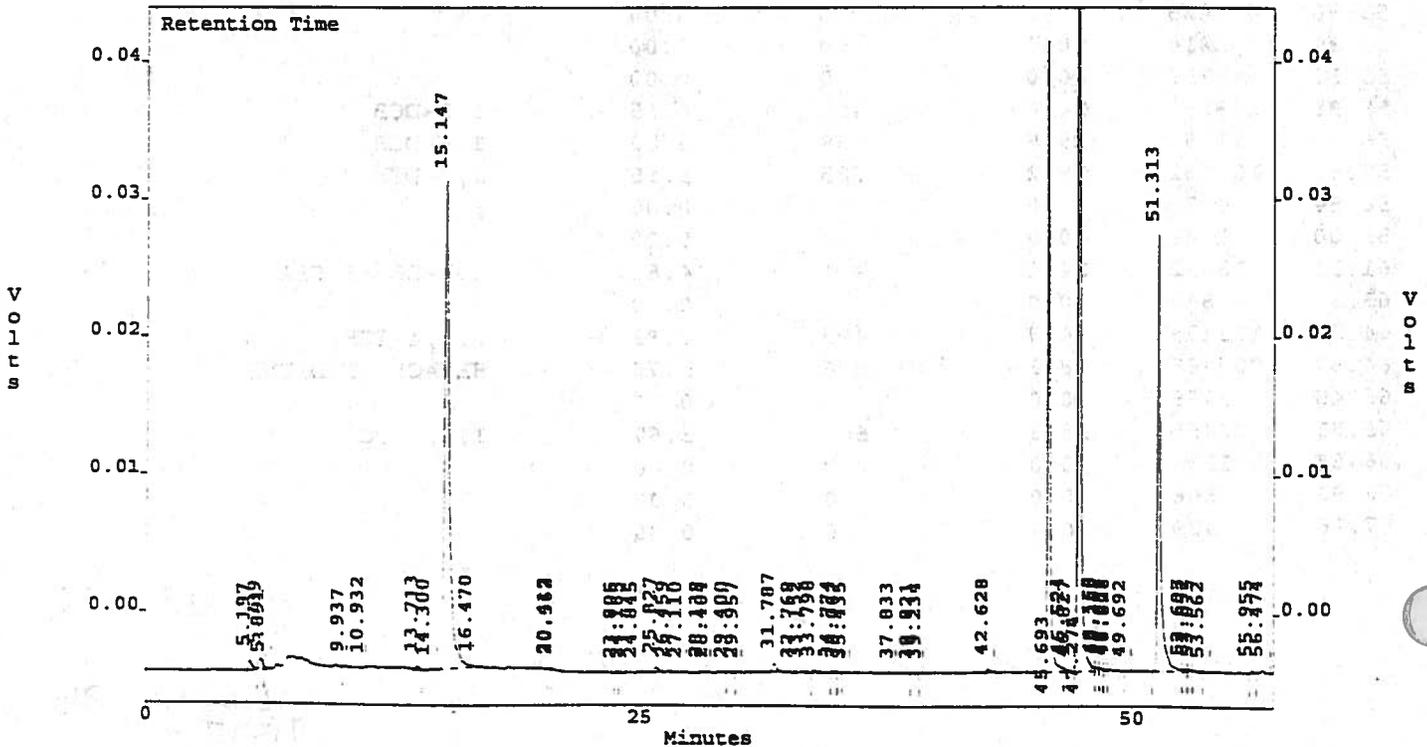
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.06
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5055s 7
 Acquired : Jun 07, 1996 16:06:05
 Printed : Jun 10, 1996 09:25:58

c:\ezchrom\chrom\160606.06 -- Channel A



c:\ezchrom\chrom\160606.06 -- Channel B



File : c:\ezchrom\chrom\160606.05
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5054s SD 6
 Acquired : Jun 07, 1996 14:38:02
 Printed : Jun 10, 1996 09:25:43

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
57.27	128078	23.3	465	4.65	n-butylbenzene
57.92	136138	25.6	512	5.12	1,2-dcb
63.27	5566	0.0	0	0.00	
64.19	82320	25.1	503	5.03	1,2,4-tcb
64.61	58633	22.2	445	4.45	Hexachlorobutadiene
65.01	115367	27.2	545	5.45	Napthalene
65.76	75690	24.4	488	4.88	1,2,3-tcb
67.20	2259	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.05
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5054s SD 6
 Acquired : Jun 07, 1996 14:38:02
 Printed : Jun 10, 1996 09:25:43

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
5.22	3645	0.0	0	0.00	
5.79	79008	16.5	331	3.31	DCDFM
6.53	204940	30.5	610	6.10	CHLOROMETHANE
6.84	218479	25.9	519	5.19	VINYL CHLORIDE
7.40	20171	0.0	0	0.00	
7.64	41766	0.0	0	0.00	
8.39	29568	21.5	430	4.30	BROMOMETHANE
8.66	238984	29.2	584	5.84	CHLOROETHANE
9.52	308168	28.8	575	5.75	TCFM
10.74	13757	0.0	0	0.00	
11.44	210555	29.3	586	5.86	FREON 113
12.32	276698	✓26.9	538	5.38	1,1-DCE
13.39	3969	0.0	0	0.00	
13.54	31341	0.0	0	0.00	
14.11	117847	0.0	0	0.00	
15.23	674993	37.0	740	7.40	METH CHLORIDE
16.21	21861	0.0	0	0.00	
16.64	4765	0.0	0	0.00	
16.95	284608	30.1	602	6.02	TRANS 1,2-DCE
18.16	2454	0.0	0	0.00	
18.31	2299	0.0	0	0.00	
18.66	735	0.0	0	0.00	
18.85	575	0.0	0	0.00	
20.42	260366	29.1	582	5.82	1,1-DCA
21.44	6774	0.0	0	0.00	
21.83	1048	0.0	0	0.00	
22.03	538	0.0	0	0.00	
24.40	65483	15.7	314	3.14	2,2-DCPA
24.86	264177	27.3	547	5.47	CIS 1,2-DCE
25.88	340444	29.1	582	5.82	CHLOROFORM
26.95	161632	28.8	577	5.77	BCM
28.12	295026	✓28.0	559	5.59	1,1,1-TCA
29.06	195661	27.0	541	5.41	1,1-DCPE
29.43	345857	28.2	563	5.63	CARBON TET
30.72	276785	30.1	602	6.02	1,2-DCA
31.58	1855	0.0	0	0.00	
31.85	27314	0.0	0	0.00	
32.60	18153	14.4	288	2.88	2-CL ETH VI ETH
33.38	775	0.0	0	0.00	
33.78	296631	✓26.0	520	5.20	TCE
34.79	204654	21.9	438	4.38	1,2-DCPA
35.92	153151	22.7	454	4.54	BRDICLMETHANE
36.16	131042	25.3	505	5.05	DIBROMOMETHANE
36.70	11322	0.0	0	0.00	
37.26	1112	0.0	0	0.00	

Continued...

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.06
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5055s 7
 Acquired : Jun 07, 1996 16:06:05
 Printed : Jun 10, 1996 09:26:00

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
5.11	3399	0.0	0	0.00	
6.18	6291	0.0	0	0.00	
6.57	4002	0.0	0	0.00	
6.68	2519	5.4	107	1.07 NC	Vinyl Chloride
12.09	9411	3.4	68	0.68 NC	1,1-dce
13.75	1134	0.0	0	0.00	
14.59	1778	0.0	0	0.00	
15.05	1706	0.0	0	0.00	
30.44	1659	1.8	36	0.36 <i>small</i>	Benzene
31.73	1080159	5.0	100	1.00	Flbenzene (IS)
33.67	2663	1.4	29	0.29 <i>small</i>	Tce
39.74	3326	2.2	43	0.43	Toluene
42.53	2129	1.8	36	0.36	Pce
44.60	1561	0.0	0	0.00	
45.63	422288	511.9	10238	102.38	1cl4fbz (surr) 102%
46.17	4065	2.2	44	0.44 <i>small</i>	Chlorobenzene
46.42	3178	0.4	8	0.08	Ethylbenzene
46.75	7293	2.8	55	0.55	M/P Xylene
47.21	1081130	5.0	100	1.00	1cl2flbz (IS)
48.61	2781	2.2	44	0.44 <i>small</i>	O Xylene
48.81	3452	0.0	0	0.00	
49.12	6117	3.1	61	0.61 NM	Styrene
50.14	2134	1.8	37	0.37 <i>small</i>	Isopropylbenzene
51.23	806386	0.0	0	0.00	
51.85	4492	2.8	55	0.55	n-propylbenzene
51.99	3810	2.1	43	0.43	Bromobenzene
52.54	8209	3.8	76	0.76	1,3,5-tmb/2-cl tol
52.82	8888	2.7	53	0.53 NM	4-cl toluene
54.01	2247	2.8	55	0.55 <i>small</i>	t-butylbenzene
54.17	5718	2.1	43	0.43	1,2,4-tmb
54.90	3545	3.1	62	0.62	s-butylbenzene
55.51	3746	3.0	61	0.61	p-isopropyltoluene
55.88	4534	1.4	29	0.29	1,3-dcb
56.37	17697	3.3	67	0.67 NC	1,4-dcb
57.26	4815	2.8	56	0.56 NM	n-butylbenzene
57.91	5808	2.3	46	0.46 <i>small</i>	1,2-dcb
59.20	1310	0.0	0	0.00	
60.18	1469	0.0	0	0.00	
63.27	2926	0.0	0	0.00	
64.19	2797	3.4	67	0.67 NM	1,2,4-tcb
64.60	5641	2.0	41	0.41 <i>small</i>	Hexachlorobutadiene
65.01	4977	3.2	64	0.64 NM	Napthalene
65.75	2414	0.9	18	0.18 <i>small</i>	1,2,3-tcb
67.26	3063	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.06
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 50558 7
 Acquired : Jun 07, 1996 16:06:05
 Printed : Jun 10, 1996 09:26:00

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln(µg/l)	Compound
5.20	8716	0.0	0	0.00	
5.74	8563	0.0	0	0.00	
5.89	2089	4.2	84	0.84 <i>pkshp</i>	DCDFM
9.94	332	0.0	0	0.00	
10.93	256	4.6	91	0.91 <i>cmal</i>	FREON 113
13.71	2959	0.0	0	0.00	
14.30	937	0.0	0	0.00	
15.15	592165	32.1*	642	6.42 *	METH CHLORIDE
16.47	718	0.0	0	0.00	
20.41	1370	0.0	0	0.00	
20.56	2148	0.0	0	0.00	
23.81	305	0.0	0	0.00	
24.16	356	0.0	0	0.00	
24.85	797	0.0	0	0.00	
25.83	5047	6.5	130	1.30 <i>NM</i>	BCM
26.46	761	0.0	0	0.00	
27.11	466	0.0	0	0.00	
28.14	1499	0.0	0	0.00	
28.40	310	1.9	38	0.38 <i>cmal</i>	CARBON TET
29.40	678	0.0	0	0.00	
29.96	652	0.0	0	0.00	
31.79	8441	9.8	196	1.96 <i>FB</i>	2-CL ETH VI ETH
32.77	409	0.0	0	0.00	
33.15	770	0.0	0	0.00	
33.80	2313	2.2	45	0.45 <i>cmal</i>	TCE
34.77	1606	0.3	5	0.05 ↓	1,2-DCPA
35.07	579	0.0	0	0.00	
35.43	491	5.5	111	1.11 <i>NM</i>	DIBROMOMETHANE
37.83	297	0.0	0	0.00	
38.82	552	0.0	0	0.00	
39.23	374	0.0	0	0.00	
42.63	3197	1.2	24	0.24 <i>cmal</i>	1,3 DCPA/PCE
45.69	400747	542.6	10851	108.51	1CL4FBZ (SURR) 109.1/.
46.52	3540	0.0	0	0.00	
46.83	1054	0.0	0	0.00	
47.27	775168	5.0	100	1.00	1CL2FBZ (IS)
48.17	3472	0.0	0	0.00	
48.37	2507	0.0	0	0.00	
48.69	1197	0.0	0	0.00	
48.63	1339	0.0	0	0.00	
49.69	496	0.0	0	0.00	
51.31	313714	0.0	0	0.00	
52.61	2504	4.0	79	0.79 <i>NM</i>	2-CL TOLUENE
52.83	2688	3.8	76	0.76 ↓	4-CL TOLUENE
53.07	2532	0.0	0	0.00	

Continued...

file : c:\ezchrom\chrom\160606.06
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 50558
 Acquired : Jun 07, 1996 16:06:05
 Printed : Jun 10, 1996 09:26:00

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
53.56	814	0.0	0	0.00	
55.96	2305	2.8	56	0.56 NC	1,3-DCB
56.47	3766	4.1	82	0.82 <i>cmk by AK</i>	1,4-DCB
57.57	717	0.0	0	0.00	
57.99	4703	4.1	81	0.81 NC	1,2-DCB
59.64	536	0.0	0	0.00	
61.28	932	10.6	213	2.13 NM	1,2-DBr-3-CPA
62.26	369	0.0	0	0.00	
64.26	3491	5.5	111	1.11	1,2,4-TCB
64.66	15441	4.8	97	0.97	HEXACHLOROCYCLOHEPTADIENE
65.11	1055	0.0	0	0.00	
65.34	1662	0.0	0	0.00	
65.85	2681	2.2	43	0.43 <i>cmk</i>	1,2,3-TCB
66.27	705	0.0	0	0.00	

* possible Lab contamination
 EAB 17 JUN 96

UI 19 Jan 96

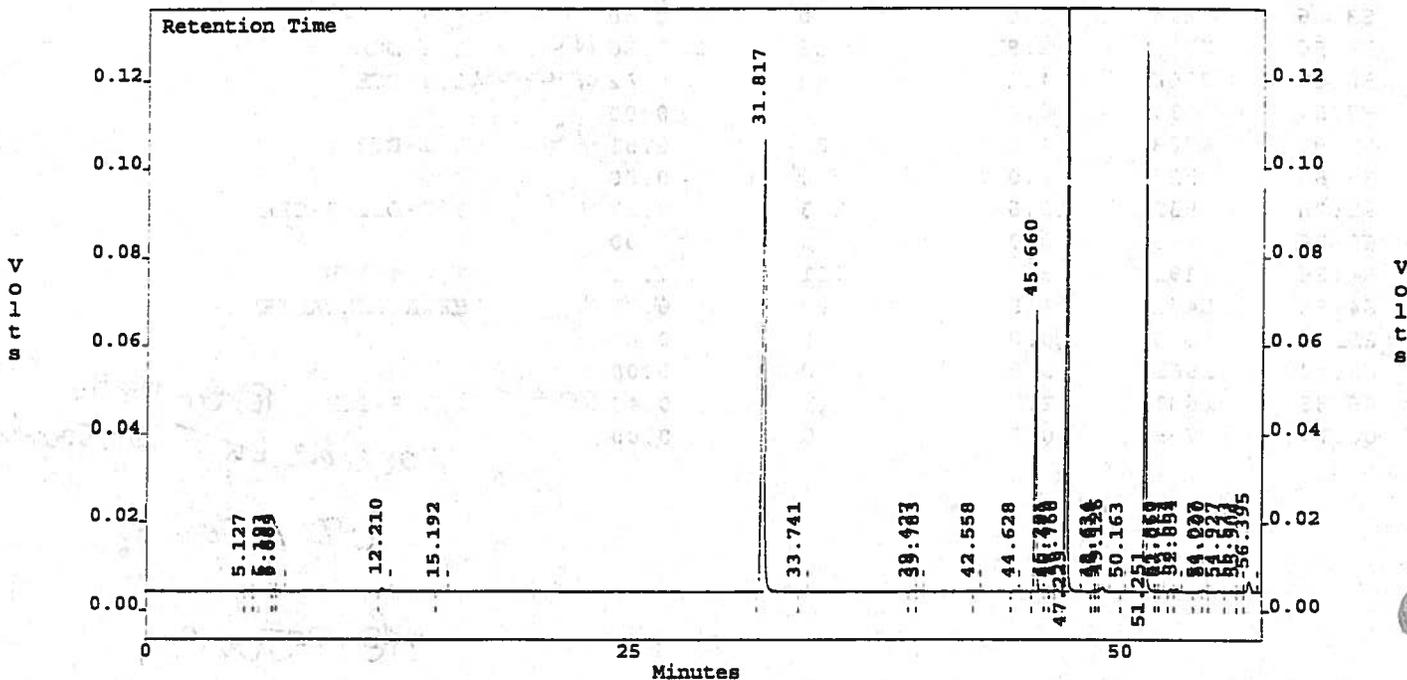
AB 17 JUN 96

AB 19 JUN 96

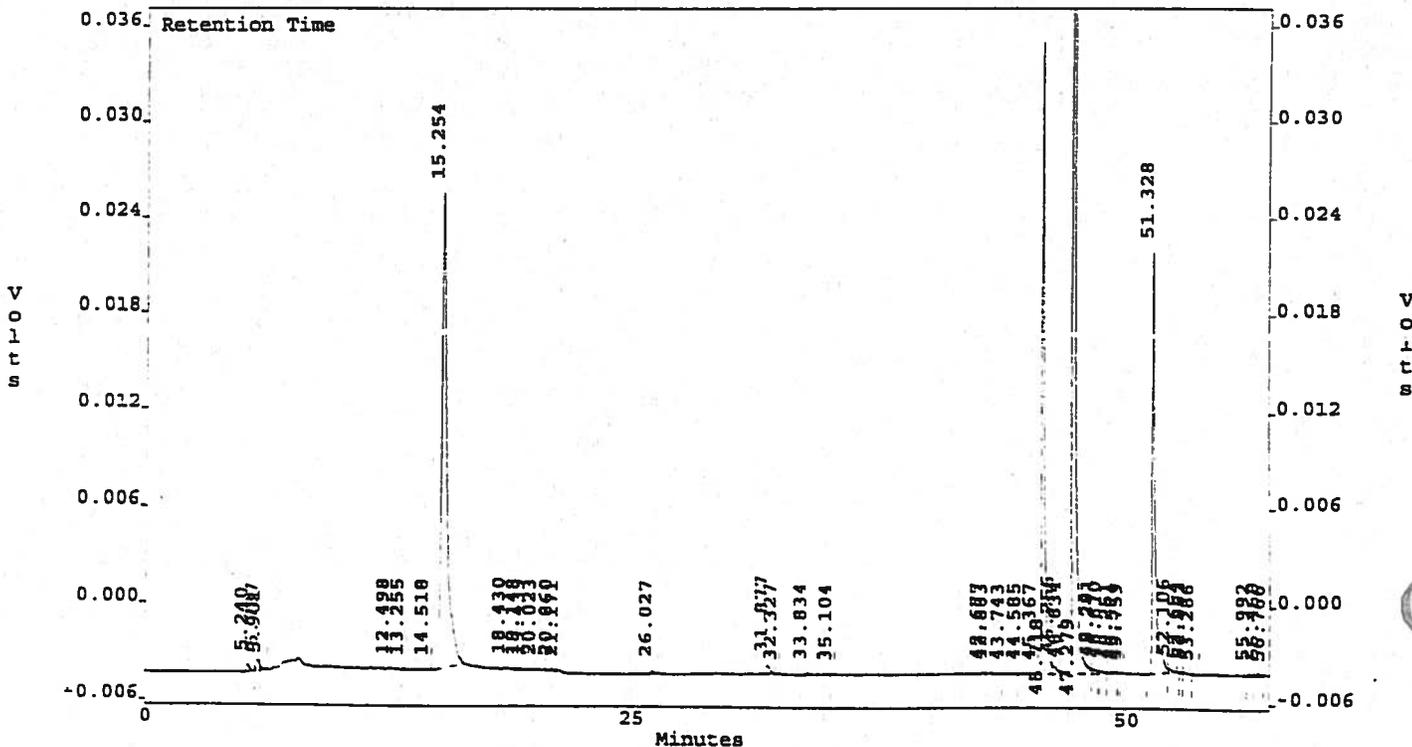
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.07
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5056s 8
 Acquired : Jun 07, 1996 17:38:32
 Printed : Jun 10, 1996 09:26:15

c:\ezchrom\chrom\160606.07 -- Channel A



c:\ezchrom\chrom\160606.07 -- Channel B



Volatiles Instrument 1 Run Log

CTL STD VOAP 0523-03 10.0µg/ml
 CHK STD VOAS 0523-03
 Mtx Spk CTL STD
 INT STD IS 0523-07 40.0µg/ml
 EXT SURR ESW 0523-06 20.0µg/ml

Analyst MW/TDF Date 06 Jun 96
 Printed IT Date 10 Jun 96
 Onto Network _____ Date _____
 Method Used VOA 0603.MET
 Batch Used 0601 I 1 - SEQ

*E MW 06 Jun 96

Data File Number	SP#	Sample ID	Aliquot	Client ID	Method	Comments	Hnu	pH	
160606.01	2	CTL VOA	5.0µl		All	Reloading because of RT shift. 10 Jun 96			
02	3	MTHD BLKW	5.0µl		↓	DCM contain. Brm, TCA, DBCM PKSHD			
03	4	52525* 5214*50525	50 µl	} See ext. log	METH 8010/8020	CM, BM, CE, TCM, TCA, 140CLB PKSHD chloroacetylch, acm cont.			
04	5	52535* 5215*50535							
05	6	52545* 5216*50545							
06	7	52553* 5220*50553					OCM, dibromom, PK SHP OCM CONT.	✓	
07	8	52565* 5220*50565	↓		↓	OCM CONT. OCM MET 99, etc	✓		
08	9	CHK VOA	5.0µl		All	✓			
09	10	x				Compounds out in CTL and CHK are in on the spite or spite dup 10 JUN 96 JT			
MW 06 Jun 96									

INTERNAL STANDARD WORKSHEET

METHOD: All Volatiles
DATE: 05 Jun 96

INSTRUMENT: 1
OPERATOR: TDF/KL/VI/CT/TH

STANDARD CONC. (ppb)	PID DETECTOR FLUOROBENZENE	PID DETECTOR 1-CHLORO-2-FLUOROBENZENE	HALL (ELCD) DETECTOR 1-CHLORO-2-FLUOROBENZENE
	RESPONSE AREA	RESPONSE AREA	RESPONSE AREA
<u>0.4</u>	<u>1007246</u>	<u>974801</u>	<u>700752</u>
<u>0.5</u>	<u>1013472</u>	<u>900664</u>	<u>578365</u>
<u>1.0</u>	<u>995578</u>	<u>973729</u>	<u>719552</u>
<u>5.0</u>	<u>1002620</u>	<u>988076</u>	<u>833755</u>
<u>10.0</u>	<u>982987</u>	<u>969072</u>	<u>913170</u>
<u>25.0</u>	<u>1015904</u>	<u>1026493</u>	<u>927730</u>
<u>50.0</u>	<u>985701</u>	<u>1073223</u>	<u>898157</u>
MEAN	<u>1000501</u>	<u>986580</u>	<u>795926</u>
UPPER LIMIT (130%)	<u>1300651</u>	<u>1282554</u>	<u>1034704</u>
LOWER LIMIT (70%)	<u>700351</u>	<u>690606</u>	<u>557148</u>
Std. Dev.	<u>N/A</u>	<u>49417</u>	<u>122605</u>
+ 3 Std. Dev.	<u>N/A</u>	<u>1134831</u>	<u>1163741</u>
- 3 Std. Dev.	<u>N/A</u>	<u>838329</u>	<u>428111</u>

Comments:

Initials TDF Date 05 Jun 96

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.07
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : 5056s 8
 Acquired : Jun 07, 1996 17:38:32
 Printed : Jun 10, 1996 09:26:17

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
5.13	1828	0.0	0	0.00	
6.19	4396	0.0	0	0.00	
6.58	2826	0.0	0	0.00	
6.67	2318	5.1	103	1.03	NC Vinyl Chloride
12.21	9487	3.5	70	0.70	NC 1,1-dce
15.19	1387	0.0	0	0.00	
31.82	1066753	5.0	100	1.00	Flbenzene (IS)
33.74	2056	1.3	26	0.26	µMCL Tce
39.43	1748	0.0	0	0.00	
39.78	2389	2.0	41	0.41	Toluene
42.56	1406	1.6	32	0.32	Pce
44.63	1506	0.0	0	0.00	
45.66	408721	501.2	10024	100.24	1cl4fbz (surr) 100%
46.20	2901	2.1	41	0.41	µMCL Chlorobenzene
46.45	2134	0.2	5	0.05	Ethylbenzene
46.77	4653	2.5	49	0.49	µMCL M/P Xylene
47.23	1069080	5.0	100	1.00	1cl2f1bz (IS)
48.63	1896	2.1	42	0.42	µMCL O Xylene
48.82	2091	2.6	53	0.53	NM Styrene
49.13	12720	0.0	0	0.00	
50.16	1341	1.7	34	0.34	µMCL Isopropylbenzene
51.25	774450	0.0	0	0.00	
51.86	3458	2.6	52	0.52	n-propylbenzene
52.01	2834	2.0	40	0.40	Bromobenzene
52.55	5955	3.6	71	0.71	1,3,5-tmb/2-cl tol
52.85	7303	2.5	50	0.50	NC 4-cl toluene
54.03	2255	2.8	55	0.55	µMCL t-butylbenzene
54.20	4206	1.9	39	0.39	1,2,4-tmb
54.93	3302	3.1	62	0.62	s-butylbenzene
55.53	3188	2.9	59	0.59	p-isopropyltoluene
55.90	3038	1.2	25	0.25	1,3-dcb
56.39	27937	4.8	97	0.97	NC 1,4-dcb
57.28	4314	2.7	54	0.54	NM n-butylbenzene
57.93	4206	2.0	40	0.40	µMCL 1,2-dcb
59.22	1638	0.0	0	0.00	
60.20	1490	0.0	0	0.00	
63.26	10452	0.0	0	0.00	
64.20	2078	3.2	64	0.64	NM 1,2,4-tcb
64.62	7607	2.8	56	0.56	Hexachlorobutadiene
65.02	5374	3.3	66	0.66	Napthalene
65.62	1966	0.0	0	0.00	
65.77	2073	0.8	16	0.16	µMCL 1,2,3-tcb
67.25	3182	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles
 File : c:\ezchrom\chrom\160606.07
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5056s 8
 Acquired : Jun 07, 1996 17:38:32
 Printed : Jun 10, 1996 09:26:17

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.24	5499	0.0	0	0.00	CTL VOAN
5.79	6722	4.9	97	0.97	DCDFM
5.90	2199	0.0	0	0.00	
12.50	357	0.0	0	0.00	
13.26	680	0.0	0	0.00	
14.52	536	0.0	0	0.00	
15.25	525729	23.3	✓465 *	4.65	METH CHLORIDE
18.43	618	5.9	117	1.17	1,1-DCA
19.15	925	0.0	0	0.00	
19.44	804	0.0	0	0.00	
20.02	993	0.0	0	0.00	
20.86	2204	0.0	0	0.00	
21.17	1633	0.0	0	0.00	
26.03	3247	1.9	37	0.37	CHLOROFORM
31.88	8186	9.3	185	1.85	2-CH-ETH-VI-ETH
32.33	216	0.0	0	0.00	
33.83	2787	0.0	0	0.00	
35.10	257	0.0	0	0.00	
42.68	978	0.0	0	0.00	
42.88	334	0.0	0	0.00	
43.74	372	0.0	0	0.00	
44.59	1477	0.0	0	0.00	
45.37	774	0.0	0	0.00	
45.72	340733	428.6	8572	85.72	1CL4FBZ (SURR)
46.26	7577	0.2	3	0.03	1,1,1,2-PCA
46.63	3640	0.0	0	0.00	
47.28	852544	5.0	100	1.00	1CL2FBZ (IS)
48.28	5130	0.0	0	0.00	
48.67	2841	0.0	0	0.00	
49.25	2788	0.0	0	0.00	
49.57	437	0.0	0	0.00	
49.76	361	0.0	0	0.00	
51.33	246909	0.0	0	0.00	
52.11	3027	6.4	128	1.28	BROMOBENZENE
52.65	324	0.0	0	0.00	
52.86	895	0.0	0	0.00	
53.29	572	0.0	0	0.00	
55.99	1334	2.6	53	0.53	1,3-DCB
56.46	2721	3.9	79	0.79	1,4-DCB
56.77	674	0.0	0	0.00	
58.02	3347	3.8	76	0.76	1,2-DCB
58.49	331	0.0	0	0.00	
60.18	886	0.0	0	0.00	
61.23	2040	11.4	227	2.27	1,2-DBr-3-CPA
61.94	771	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160606.07
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : 5056s 8
 Acquired : Jun 07, 1996 17:38:32
 Printed : Jun 10, 1996 09:26:17

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
63.14	1322	0.0	0	0.00	
64.26	2660	5.4	107	1.07	1,2,4-TCB
64.53	281	0.0	0	0.00	
64.69	20677	5.3	105	1.05	HEXACLBUTADIENE
64.87	3124	0.0	0	0.00	
65.20	1246	0.0	0	0.00	
65.45	734	0.0	0	0.00	
65.86	4503	2.5	50	0.50	1,2,3-TCB
66.18	316	0.0	0	0.00	
66.33	255	0.0	0	0.00	
67.01	480	0.0	0	0.00	
67.25	222	0.0	0	0.00	

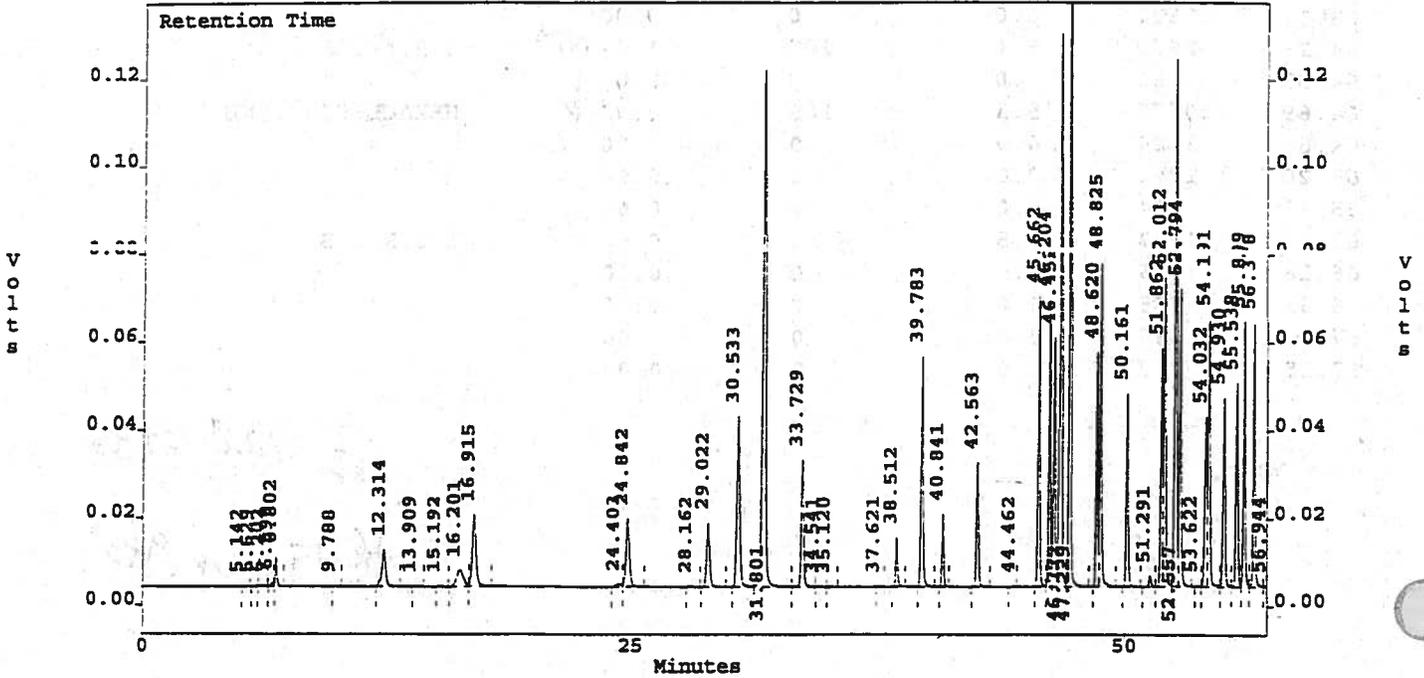
UI 12 Jun 96

AG 17 Jun 96

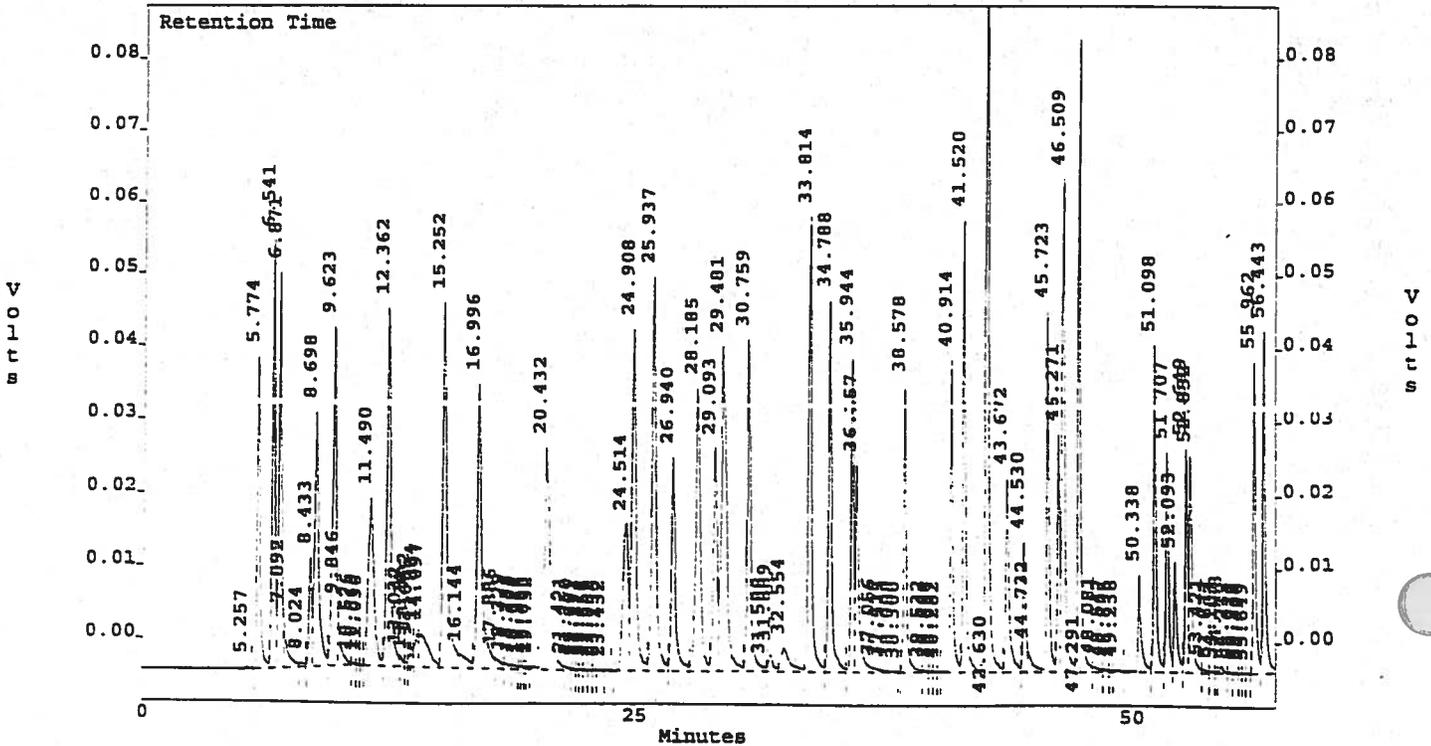
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.08
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 19:12:36
 Printed : Jun 10, 1996 09:26:40

c:\ezchrom\chrom\160606.08 -- Channel A



c:\ezchrom\chrom\160606.08 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.08
Method : c:\ezchrom\chrom\lvoa0606.met
Sample ID : CHK VOA 1
Acquired : Jun 07, 1996 19:12:36
Printed : Jun 10, 1996 09:26:42

Channel A Results

Table with 6 columns: RT(min), Pk Area, Air(ng), Soil (µg/kg), Soln (µg/L), Compound. Rows list various chemical compounds and their corresponding measurements.

Continued...

File : c:\ezchrom\chrom\160606.08
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 19:12:36
 Printed : Jun 10, 1996 09:26:42

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
56.38	371038	48.6	971	9.71	1,4-dcb
56.94	2939	0.0	0	0.00	
57.28	327375	50.0	999	9.99	n-butylbenzene
57.93	300182	48.6	972	9.72	1,2-dcb
58.62	2834	0.0	0	0.00	
58.98	1835	0.0	0	0.00	
59.22	5585	0.0	0	0.00	
59.61	1638	0.0	0	0.00	
60.20	3255	0.0	0	0.00	
60.51	1629	0.0	0	0.00	
60.81	1933	0.0	0	0.00	
61.03	1737	0.0	0	0.00	
61.23	2110	0.0	0	0.00	
61.62	2448	0.0	0	0.00	
62.24	1178	0.0	0	0.00	
62.49	1458	0.0	0	0.00	
62.75	3613	0.0	0	0.00	
63.25	5523	0.0	0	0.00	
63.67	2239	0.0	0	0.00	
63.81	1553	0.0	0	0.00	
64.19	82370	22.5	450	4.50	1,2,4-tcb
64.61	90381	30.3	605	6.05	Hexachlorobutadiene
65.01	104068	22.1	442	4.42	Napthalene
65.75	50211	14.3	287	2.87	1,2,3-tcb
65.98	1318	0.0	0	0.00	
67.28	1873	0.0	0	0.00	

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\160606.08
 Method : c:\ezchrom\chrom\lvoa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 19:12:36
 Printed : Jun 10, 1996 09:26:42

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.26	3276	0.0	0	0.00	
5.77	441851	76.3	1526	15.26 <i>ok c/c</i>	DCDFM
6.54	566538	79.4	1588	15.88 <i>↓</i>	CHLOROMETHANE
6.87	508415	60.1	1202	12.02 <i>**</i>	VINYL CHLORIDE
7.09	87556	0.0	0	0.00	
8.02	9582	0.0	0	0.00	
8.43	147284	72.0	1441	14.41 <i>**</i>	BROMOMETHANE
8.70	523739	62.1	1242	12.42 <i>ok c/c</i>	CHLOROETHANE
9.62	617670	56.2	1123	11.23	TCFM
9.85	77241	0.0	0	0.00	
10.58	2143	0.0	0	0.00	
10.87	1002	0.0	0	0.00	
11.04	489	0.0	0	0.00	
11.49	453421	59.0	1180	11.80 <i>***</i>	FREON 113
12.36	679624	63.3	1267	12.67 <i>**</i>	1,1-DCE
13.03	16264	0.0	0	0.00	
13.32	5265	0.0	0	0.00	
13.49	20400	0.0	0	0.00	
13.60	23000	0.0	0	0.00	
13.88	53153	0.0	0	0.00	
14.10	161686	0.0	0	0.00	
15.25	794444	47.3	946	9.46	METH CHLORIDE
16.14	50057	0.0	0	0.00	
17.00	658321	65.6	1312	13.12 <i>***</i>	TRANS 1,2-DCE
17.89	27576	0.0	0	0.00	
18.33	14741	0.0	0	0.00	
18.76	9808	0.0	0	0.00	
19.08	2846	0.0	0	0.00	
19.23	3569	0.0	0	0.00	
19.37	1940	0.0	0	0.00	
19.60	3371	0.0	0	0.00	
19.75	7656	0.0	0	0.00	
20.43	617563	62.2	1244	12.44 <i>*</i>	1,1-DCA
21.42	7158	0.0	0	0.00	
21.75	3199	0.0	0	0.00	
22.00	833	0.0	0	0.00	
22.17	1084	0.0	0	0.00	
22.41	1345	0.0	0	0.00	
22.65	1095	0.0	0	0.00	
22.88	786	0.0	0	0.00	
23.13	2092	0.0	0	0.00	
23.43	1095	0.0	0	0.00	
24.51	383320	76.9	1539	15.39 <i>***</i>	2,2-DCEP
24.91	722496	73.5	1470	14.70 <i>ok #10</i>	CIS 1,2-DCE
25.94	796265	67.3	1346	13.46 <i>*</i>	CHLOROFORM

Continued...

File : c:\ezchrom\chrom\160606.08
 Method : c:\ezchrom\chrom\1voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 07, 1996 19:12:36
 Printed : Jun 10, 1996 09:26:42

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
26.94	416462	66.5	1330	13.30 * * * *	BCM
28.18	649380	58.7	1173	11.73 * *	1,1,1-TCA
29.09	391216	54.8	1097	10.97	1,1-DCPE
29.48	794881	63.6	1272	12.72 * *	CARBON TET
30.76	521300	55.4	1108	11.08	1,2-DCA
31.59	6080	0.0	0	0.00	
31.89	36714	0.0	0	0.00	
32.55	99732	55.5	1110	11.10	2-CL ETH VI ETH
33.81	711893	60.8	1217	12.17 * *	TCE
34.79	583207	63.5	1270	12.70 * *	1,2-DCPA
35.94	413977	58.3	1166	11.66 * *	BRDCLMETHANE
36.16	331793	56.7	1134	11.34	DIBROMOMETHANE
37.06	11058	0.0	0	0.00	
37.42	2652	0.0	0	0.00	
37.57	5017	0.0	0	0.00	
38.01	2783	0.0	0	0.00	
38.30	878	0.0	0	0.00	
38.58	380804	54.3	1085	10.85	CIS 1,3-DCPE
39.53	3933	0.0	0	0.00	
39.90	2254	0.0	0	0.00	
40.06	1503	0.0	0	0.00	
40.28	1066	0.0	0	0.00	
40.91	372691	59.1	1182	11.82 * * *	TRANS 1,3-DCPE
41.52	573467	64.5	1290	12.90 *	1,1,2-TCA
42.02	1202228	121.5	2629	26.29 * * * *	1,3 DCPA/PCE o.c.i.d
43.67	306772	55.5	1110	11.10	DIBRCLMETHANE
44.53	171214	51.5	1030	10.30	1,2-DBEA (EDB)
44.73	47462	0.0	0	0.00	
45.72	425547	569.3	11385	113.85	1CL4FBZ (SURR) // 4
46.27	236968	20.3	405	4.05 * * * *	1,1,1,2-PCA
46.51	712411	0.0	0	0.00	
47.29	781612	5.0	100	1.00	1CL2FBZ (IS)
48.08	15750	0.0	0	0.00	
48.55	6177	0.0	0	0.00	
48.89	2943	0.0	0	0.00	
49.24	6405	0.0	0	0.00	
50.34	149397	65.6	1313	13.13 * * *	BROMOFORM
51.10	390736	63.1	1261	12.61 * *	1,1,2,2-PCA
51.71	277056	53.3	1066	10.66	1,2,3-TCPA
52.09	157096	57.9	1158	11.58 o.c.t.c	BROMOBENZENE
52.65	242624	0.0	0	0.00	
52.85	290965	60.5	1209	12.09 o.c.t.c	4-CL TOLUENE
53.42	9534	0.0	0	0.00	
53.87	4321	0.0	0	0.00	
54.11	1495	0.0	0	0.00	
54.39	14206	0.0	0	0.00	
54.71	2261	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\160606.08
 ethod : c:\ezchrom\chrom\1voa0606.met
 ample ID : CHK VOA 1
 cquired : Jun 07, 1996 19:12:36
 Printed : Jun 10, 1996 09:26:43

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
55.02	2218	0.0	0	0.00	
55.24	760	0.0	0	0.00	
55.41	584	0.0	0	0.00	
55.65	566	0.0	0	0.00	
55.96	360107	57.4	1148	11.48	1,3-DCB
56.44	412139	60.6	1212	12.12 ok CTC	1,4-DCB
58.01	354536	59.0	1180	11.80 ✓	1,2-DCB
58.54	11266	0.0	0	0.00	
59.02	1519	0.0	0	0.00	
59.21	1711	0.0	0	0.00	
59.69	1400	0.0	0	0.00	
60.42	748	0.0	0	0.00	
60.79	384	0.0	0	0.00	
61.31	32994	35.5	710	7.10 * * * *	1,2-DBr-3-CPA
61.72	4817	0.0	0	0.00	
62.20	1666	0.0	0	0.00	
62.34	867	0.0	0	0.00	
62.60	2698	0.0	0	0.00	
63.51	2236	0.0	0	0.00	
63.95	2202	0.0	0	0.00	
64.25	128332	26.2	524	5.24 ok CTC	1,2,4-TCB
64.67	275408	38.2	765	7.65 * * * *	HEXACL BUTADIENE
65.58	5262	0.0	0	0.00	
65.80	77383	19.1	383	3.83 * * * *	1,2,3-TCB
66.55	3588	0.0	0	0.00	
67.00	2144	0.0	0	0.00	
67.62	1097	0.0	0	0.00	

* out of ±15% range, ok MS

* * okay in matrix spike dup.

* * * out of ±15% for day
 + * * * non method for days analysis

17 Jun 96 LT

AB 19 Jun 96

19 Jun 96 LT

VOIAGES INSTRUMENT 3 RUN LOG

021

CTL STD VOAP 0523-3 10.0Mg/mL
 CHK STD VOAS 0523-3
 Mtx Spk CTL STD
 INT STD 15 0523-05 40.0Mg/mL
 EXT SURR ESU 0523-04 20.0Mg/mL

Analyst TDF/CT/ML Date 03 JUN 96
 Printed CT Date 04 JUN 96
 Onto Network Date
 Method Used ~~360603.MCT~~ / 360603.MCT
 Batch Used 0603I3
 # @ 03 JUN 96 TDF ** @ 04 JUN 96

Data File Number	SP=	Sample ID	Aliquot	Client ID	Method	Comments	Hnu	pH
360603.01	1	5025K	5.0ml	C-D-200	502.2(S)	second bottle, report as duplicate for next run.		<2
02	2	4827RX5	1.0ml	PS+WCL27630	601	file not needed, not printed		
03	3	4834R220000	25 µl	DM-MP3D	↓	1:100 dil but dil 20000 @ 21 JUN 96 @ 40,000 @ 08 JUN 96		
04	4	CHK BLK	5.0 ml		All	✓		
05	5	0.4 ppb	2.0 µl			} x10 dil 360603.MCT		
06	6	0.5 ppb	2.5 µl					
07	7	1.0 ppb	5.0 µl					
08	8	5.0 ppb	2.5 µl					
09	9	10.0 ppb	5.0 µl					
10	10	25.0 ppb	12.5 µl					
11	11	50.0 ppb	25.0 µl					
12 *13	12	CHK BLK	5.0 ml			✓		
13	13	MTHD BLK	↓			✓		
14	14	2.0 ppb	10.0 µl			✓		
15	15	CHK VOA	5.0 µl		↓	✓		
16	16	5268	5.0 µl	LD-205	502.2(S)	✓		<2
17	1	5269	↓	LD-206	↓	✓		<2
18	2	5270	↓	LD-207	↓	✓		↓
19	3	CTL VOA	5.0 µl		All	✓		
03 JUN 96								

Volatiles Instrument 3 Run Log

CTL STD VOAP 0523-3 10.0 μ g/mL
 CHK STD VOAS 0523-3
 Mix Spk CTL STD
 INT STD 15 0523-C5 40.0 μ g/mL
 EXT SLRR ESU 0523-04 200 μ g/mL

Analyst TDF/LT/ML Date 03 JUN 96
 Printed CT Date 04 JUN 96
 Onto Network Date
 Method Used ~~3300~~ 3300A 2000
 Batch Used 0603E3
 # @ 03 JUN 96 TDF # @ 04 JUN 96

Data File Number	SP=	Sample ID	Aliquot	Client ID	Method	Comments	Hnu	pH
360603.01	1	50256	5.0ml	C0-200	512.2(S)	second bottle, report as duplicate #05 JUN 96		<2
02	2	4927X5	1.0ml	PS-WCL27630	601	file not needed, not printed		
03	3	4834R220000	25 μ l	DM-MP3D	↓	1:100 dil total dil 220000 ✓		
04	4	CHK BLK	5.0 ml		All	✓ #05 JUN 96		
05	5	0.4 ppb	2.0 μ l			} x10 dil } } 3300A0603.MCT		
06	6	0.5 ppb	2.5 μ l					
07	7	1.0 ppb	5.0 μ l					
08	8	5.0 ppb	2.5 μ l					
09	9	10.0 ppb	5.0 μ l					
10	10	25.0 ppb	12.5 μ l					
11	11	50.0 ppb	25.0 μ l					
12	12	CHK BLK	5.0 ml				✓ ↓	
13	13	MTHD BLK	↓				✓ #05 JUN 96	
14	14	2.0 ppb	10.0 μ l				✓ ↓	
15	15	CHK VOA	5.0 μ l				✓ ↓	
16	16	5268	5.0 ml	CD-205	502.2(S)	✓ #07 JUN 96		<2
17	1	5269	↓	CD-206	↓	✓ ↓		<2
18	2	5270	↓	CD-207	↓	✓ ↓		↓
19	3	CTL VOA	5.0 μ l		All	✓ #05 JUN 96		

03 JUN 96

INTERNAL STANDARD WORKSHEET

METHOD: All Volatiles
DATE: 03 Jun 96 ✓

INSTRUMENT: 3 ✓
OPERATOR: CT

STANDARD CONC. (ppb)	PID DETECTOR FLUOROBENZENE	PID DETECTOR 1-CHLORO-2-FLUOROBENZENE	HALL (ELCD) DETECTOR 1-CHLORO-2-FLUOROBENZENE
	RESPONSE AREA	RESPONSE AREA	RESPONSE AREA
<u>0.4</u> ✓	<u>788060</u> ✓	<u>730600</u> ✓	<u>543532</u> ✓
<u>0.5</u> ✓	<u>786608</u> ✓	<u>726002</u> ✓	<u>531039</u> ✓
<u>1.0</u> ✓	<u>826885</u> ✓	<u>760697</u> ✓	<u>567683</u> ✓
<u>5.0</u> ✓	<u>820406</u> ✓	<u>762154</u> ✓	<u>593539</u> ✓
<u>10.0</u> ✓	<u>823972</u> ✓	<u>773407</u> ✓	<u>560592</u> ✓
<u>25.0</u> ✓	<u>828883</u> ✓	<u>785580</u> ✓	<u>627335</u> ✓
<u>50.0</u> ✓	<u>811964</u> ✓	<u>789482</u> ✓	<u>671429</u> ✓
MEAN	<u>812397</u> ✓	<u>761132</u> ✓	<u>585022</u> ✓
UPPER LIMIT (130%)	<u>1056116</u> ✓	<u>989472</u> ✓	<u>760529</u> ✓
LOWER LIMIT (70%)	<u>568678</u> ✓	<u>532792</u> ✓	<u>409515</u> ✓
Std. Dev.	<u>16636</u> ✓	<u>23052</u> ✓	<u>46077</u> ✓
+ 3 Std. Dev.	<u>862305</u> ✓ (106%)	<u>830288</u> ✓ (109%)	<u>723253</u> ✓ (124%)
- 3 Std. Dev.	<u>762489</u> ✓ (94%)	<u>691976</u> ✓ (91%)	<u>446291</u> ✓ (76%)

Comments:

Initials CT Date 05 Jun 96

4605 Jun 96

OUT OF CONTROL EVENT FORM

Date of Event: 03 JUNE 96

Method: 601, 8010/8020

Analyst: TDP/MM/TH/xw/UE/CL/AG/AMB

Out of Control event (check all that apply)	Analyte	% Recovered	Acceptable Range
<input type="checkbox"/> RPD outside of criteria			
<input type="checkbox"/> BS/BSD outside of criteria			
<input type="checkbox"/> MS/MSD outside of criteria			
<input type="checkbox"/> Surrogate outside of criteria			
<input checked="" type="checkbox"/> Calibration Verification outside of range			

<input type="checkbox"/> Incorrect amount of Surrogate or spike added		<input type="checkbox"/> Sample lost in lab accident
<input type="checkbox"/> Contract requirements not met		<input type="checkbox"/> Repeat analyzed past holding time
<input type="checkbox"/> Insufficient number QC samples run		<input type="checkbox"/> Instrument failure during analysis
<input type="checkbox"/> Reagents/Standards expired	<input checked="" type="checkbox"/>	<input type="checkbox"/> Laboratory contamination
<input type="checkbox"/> Missed holding time		<input type="checkbox"/> Suspected glassware contamination
<input checked="" type="checkbox"/> Method blank result greater than MRL		<input type="checkbox"/> Sample result too high to see spike
<input type="checkbox"/> Lab contaminated trip blanks		
<input type="checkbox"/> Matrix Interference		

Sample ID/Label
E76-514 to 515
E76-5057 to 5058
E76-4834
E76-4586
E76-4876 to 490
E76-4586
E76-4863
E76-5047 to 5048
E76-5273 to 5278
E76-5274 to 5277

For additional OOCE or corrective action use back of page.

Corrective Action not successful successful not applicable

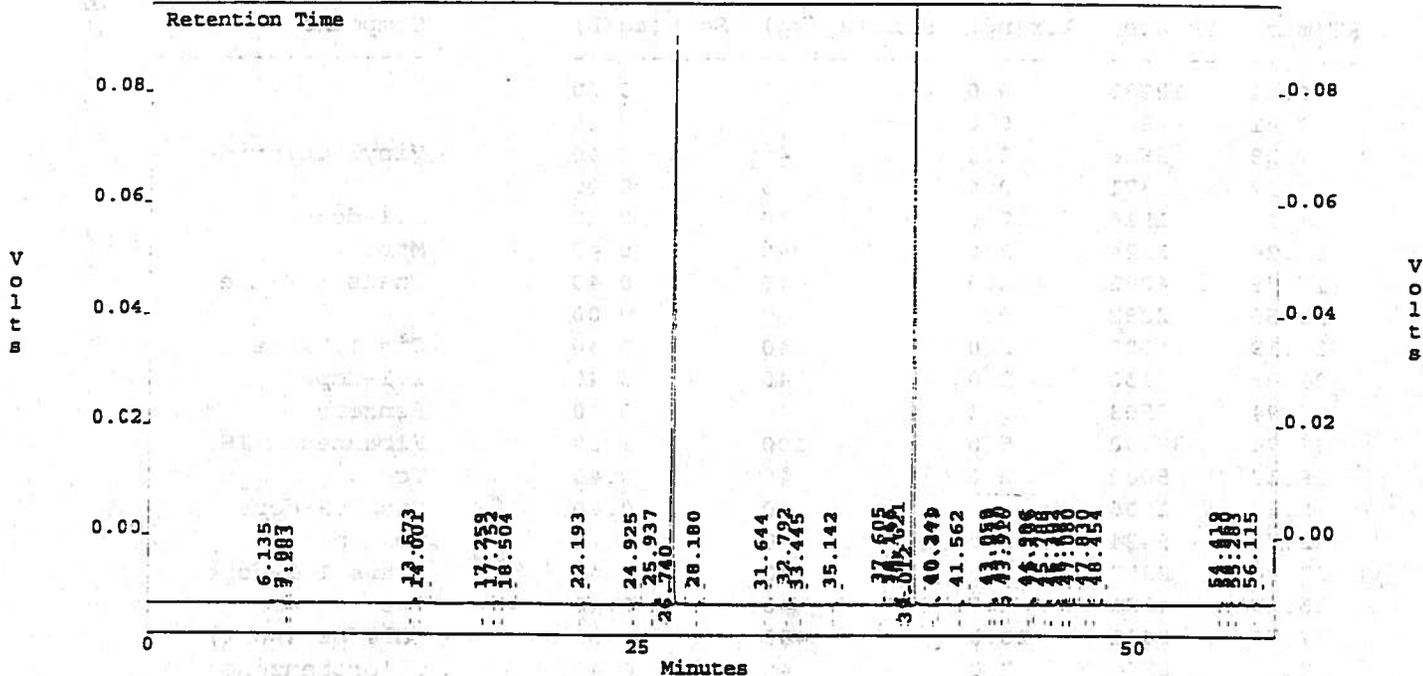
<input checked="" type="checkbox"/> Report to be flagged	<input type="checkbox"/> Rerun result reported	<input type="checkbox"/> Client has been notified	<input checked="" type="checkbox"/> Original results reported
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Form Completed By: <u>[Signature]</u>	Date: <u>11 JUNE 96</u>
Laboratory Manager/Supervisor: _____	Date: _____
Quality Assurance Representative: _____	Date: _____

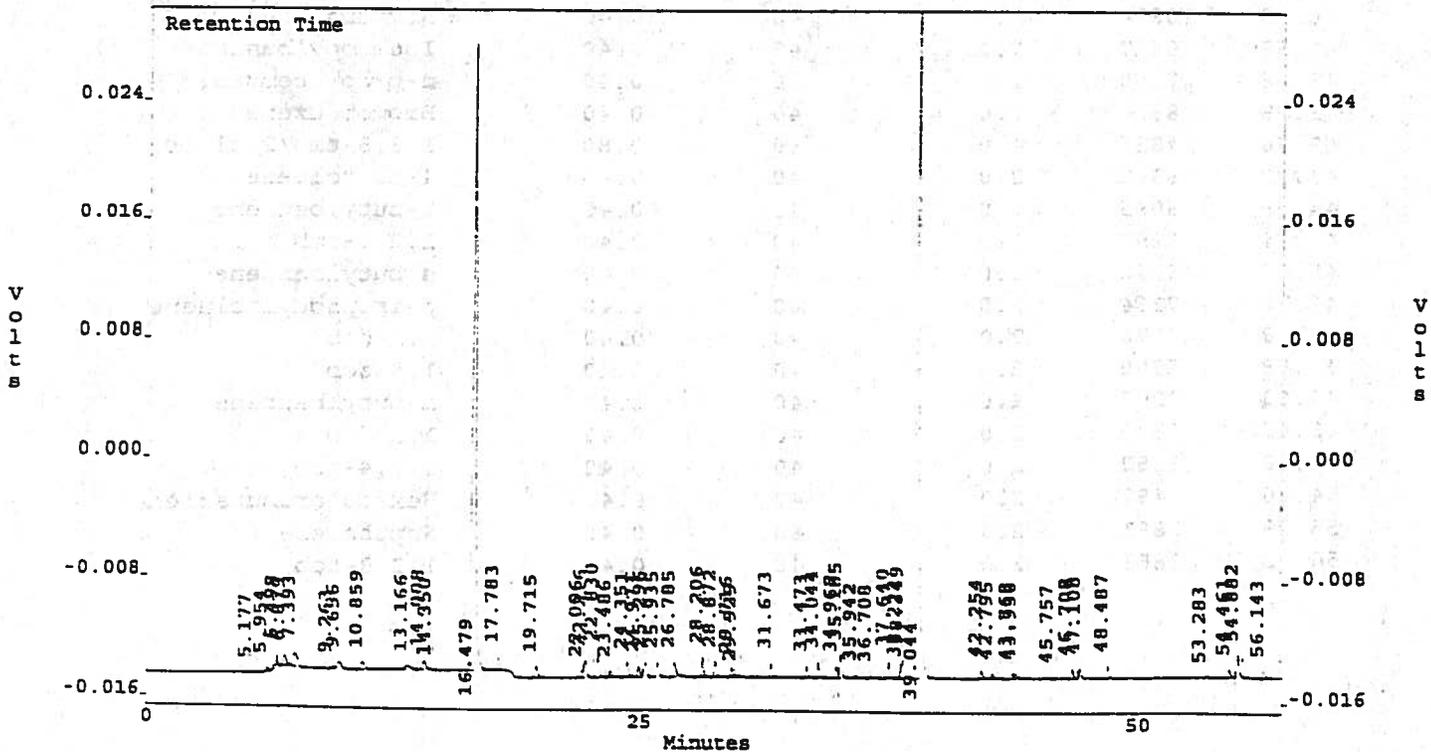
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.05
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.4 ppb 5
 Acquired : Jun 03, 1996 21:46:32
 Printed : Jun 04, 1996 17:02:56

c:\ezchrom\chrom\360603.05 -- Channel A



c:\ezchrom\chrom\360603.05 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.05
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.4 ppb 5
 Acquired : Jun 03, 1996 21:46:32
 Printed : Jun 04, 1996 17:02:59

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.14	18273	0.0	0	0.00	
7.01	3584	0.0	0	0.00	
7.28	5613	2.0	40	0.40	Vinyl Chloride
13.57	9371	0.0	0	0.00	
14.00	1914	2.0	40	0.40	1,1-dce
17.26	1524	2.0	40	0.40	Mtbe
17.75	4082	2.0	40	0.40	Trans 1,2-dce
18.50	2292	0.0	0	0.00	
22.19	4002	2.0	40	0.40	Cis 1,2-dce
24.93	3150	2.0	40	0.40	1,1-dcpe
25.94	8503	2.0	40	0.40	Benzene
26.74	788060	5.0	100	1.00	Flbenzene (IS)
28.18	5029	2.0	40	0.40	Tce
31.64	1706	2.0	40	0.40	Cis 1,3-dcpe
32.79	9424	2.0	40	0.40	Toluene
33.44	2237	2.0	40	0.40	Trans 1,3-dcpe
35.14	4124	2.0	40	0.40	Pce
37.60	9431	20.0	400	4.00	1cl4fbz (surr)
38.17	8564	2.0	40	0.40	Chlorobenzene
38.34	7583	2.0	40	0.40	Ethylbenzene
38.62	16798	4.0	80	0.80	M/P Xylene
39.01	730600	5.0	100	1.00	1cl2flbz (IS)
40.24	7452	2.0	40	0.40	O Xylene
40.38	10624	2.0	40	0.40	Styrene
41.56	6477	2.0	40	0.40	Isopropylbenzene
43.06	7190	2.0	40	0.40	n-propylbenzene
43.25	8636	2.0	40	0.40	Bromobenzene
43.66	17855	4.0	80	0.80	1,3,5-tmb/2-cl tol
43.92	8342	2.0	40	0.40	4-cl toluene
44.99	6085	2.0	40	0.40	t-butylbenzene
45.14	8257	2.0	40	0.40	1,2,4-tmb
45.79	6572	2.0	40	0.40	s-butylbenzene
46.30	7164	2.0	40	0.40	p-isopropyltoluene
46.68	7176	2.0	40	0.40	1,3-dcb
47.08	7908	2.0	40	0.40	1,4-dcb
47.83	7267	2.0	40	0.40	n-butylbenzene
48.45	7340	2.0	40	0.40	1,2-dcb
54.42	3852	2.0	40	0.40	1,2,4-tcb
54.86	4492	2.0	40	0.40	Hexachlorobutadiene
55.28	3891	2.0	40	0.40	Napthalene
56.12	3851	2.0	40	0.40	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.05
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.4 ppb 5
 Acquired : Jun 03, 1996 21:46:32
 Printed : Jun 04, 1996 17:02:59

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.18	338	0.0	0	0.00	
5.95	2252	2.0	40	0.40	DCDFM
6.50	5864	0.0	0	0.00	
6.88	6644	2.0	40	0.40	CHLOROMETHANE
7.39	15043	2.0	40	0.40	VINYL CHLORIDE
9.26	966	2.0	40	0.40	BROMOMETHANE
9.66	6823	2.0	40	0.40	CHLOROETHANE
10.86	7850	2.0	40	0.40	TCFM
13.17	5942	2.0	40	0.40	FREON 113
14.01	7827	2.0	40	0.40	1,1-DCE
14.35	312	0.0	0	0.00	
16.48	471302	2.0	40	0.40	METH CHLORIDE
17.78	7611	2.0	40	0.40	TRANS 1,2-DCE
19.72	8458	2.0	40	0.40	1,1-DCA
22.01	4567	2.0	40	0.40	2,2-DCPA
22.22	11378	2.0	40	0.40	CIS 1,2-DCE
22.83	14722	2.0	40	0.40	CHLOROFORM
23.49	3995	2.0	40	0.40	BCM
24.35	11008	2.0	40	0.40	1,1,1-TCA
24.97	6730	2.0	40	0.40	1,1-DCPE
25.30	10629	2.0	40	0.40	CARBON TET
25.94	7661	2.0	40	0.40	1,2-DCA
26.79	11298	2.0	40	0.40	2-CL ETH VI ETH
28.21	10376	2.0	40	0.40	TCE
28.87	9075	2.0	40	0.40	1,2-DCPA
29.72	4859	2.0	40	0.40	BRDICLMETHANE
29.93	1247	2.0	40	0.40	DIBROMOMETHANE
31.67	6729	2.0	40	0.40	CIS 1,3-DCPE
33.47	5496	2.0	40	0.40	TRANS 1,3-DCPE
34.04	7624	2.0	40	0.40	1,1,2-TCA
34.96	5035	2.0	40	0.40	1,3-DCPA
35.19	12116	2.0	40	0.40	PCE
35.94	2009	2.0	40	0.40	DIBRCLMETHANE
36.71	1580	2.0	40	0.40	1,2-DBEA (EDB)
37.64	7669	20.0	400	4.00	1CL4FBZ (SURR)
38.22	2202	2.0	40	0.40	CHLOROBENZENE
38.35	11982	2.0	40	0.40	1,1,1,2-PCA
39.04	543537	5.0	100	1.00	1CL2FBZ (IS)
42.25	4268	2.0	40	0.40	1,1,2,2-PCA
42.79	3299	2.0	40	0.40	1,2,3-TCPA
43.77	2288	2.0	40	0.40	2-CL TOLUENE
43.94	2830	2.0	40	0.40	4-CL TOLUENE
45.76	643	0.0	0	0.00	
46.71	4625	2.0	40	0.40	1,3-DCB
47.11	4968	2.0	40	0.40	1,4-DCB

Continued...

File : c:\ezchrom\chrom\360603.05
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.4 ppb 5
 Acquired : Jun 03, 1996 21:46:32
 Printed : Jun 04, 1996 17:02:59

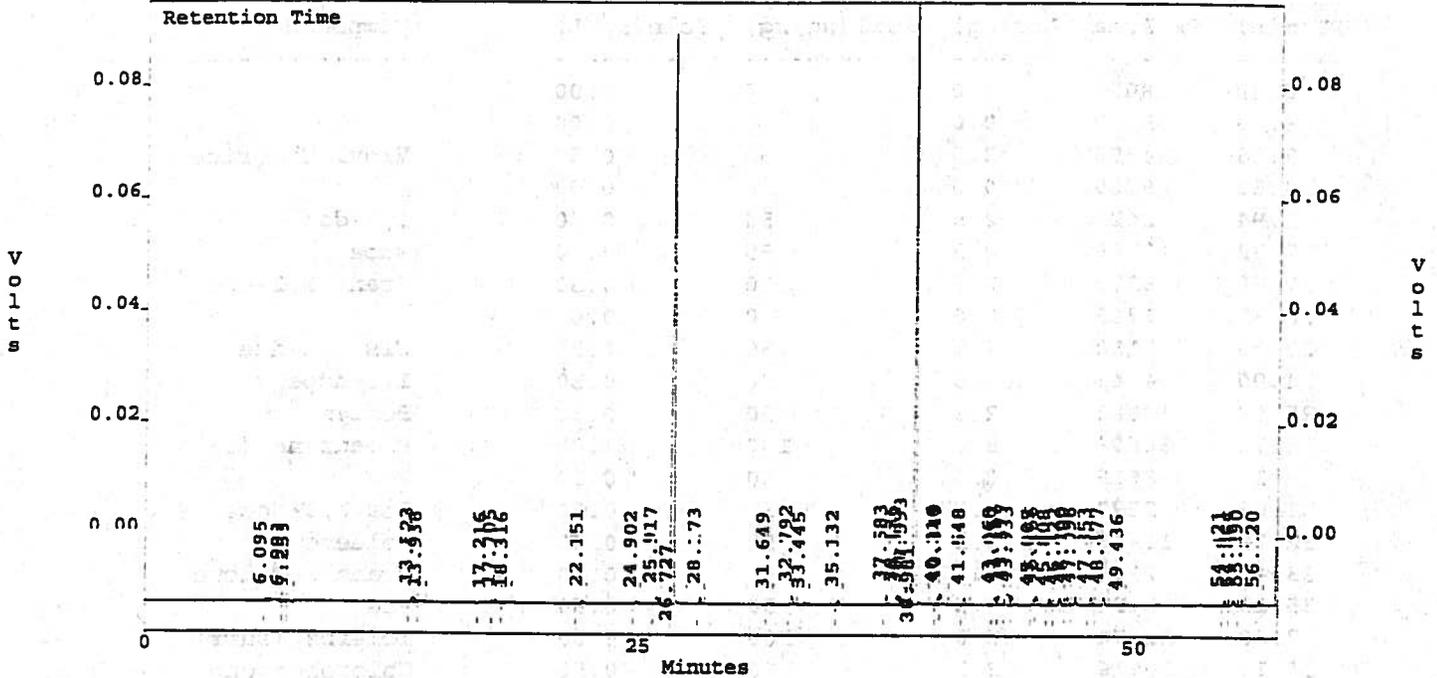
Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
48.49	6140	2.0	40	0.40	1,2-DCB
53.28	317	0.0	0	0.00	
54.46	4318	2.0	40	0.40	1,2,4-TCB
54.88	11227	2.0	40	0.40	HEXACLBTADIENE
56.14	4257	2.0	40	0.40	1,2,3-TCB

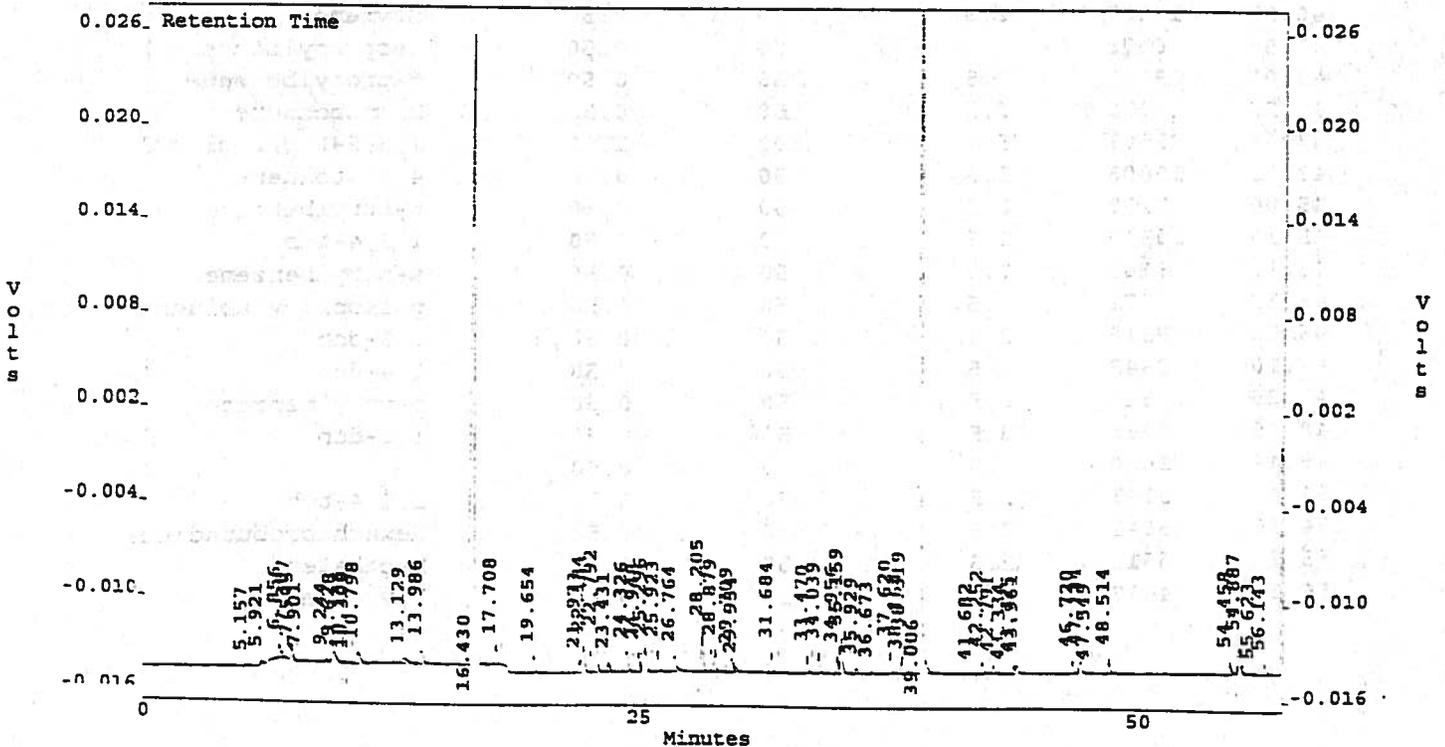
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.5 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:13

c:\ezchrom\chrom\360603.06 -- Channel A



c:\ezchrom\chrom\360603.06 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.5 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:15

Channel A results

RT(min)	Pk Area	Air (ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
6.10	18057	0.0	0	0.00	
6.99	5307	0.0	0	0.00	
7.26	4308	2.5	50	0.50	Vinyl Chloride
13.52	9729	0.0	0	0.00	
13.94	2423	2.5	50	0.50	1,1-dce
17.22	2255	2.5	50	0.50	Mtbe
17.70	5379	2.5	50	0.50	Trans 1,2-dce
18.32	1742	0.0	0	0.00	
22.15	5180	2.5	50	0.50	Cis 1,2-dce
24.90	4141	2.5	50	0.50	1,1-dcpe
25.92	10885	2.5	50	0.50	Benzene
26.73	786608	5.0	100	1.00	Flbenzene (IS)
28.17	8619	2.5	50	0.50	Tce
31.65	2277	2.5	50	0.50	Cis 1,3-dcpe
32.79	11616	2.5	50	0.50	Toluene
33.44	2935	2.5	50	0.50	Trans 1,3-dcpe
35.13	5424	2.5	50	0.50	Pce
37.58	11674	25.0	500	5.00	1cl4fbz (surr)
38.14	10916	2.5	50	0.50	Chlorobenzene
38.31	9718	2.5	50	0.50	Ethylbenzene
38.59	21358	5.0	100	1.00	M/P Xylene
38.98	726002	5.0	100	1.00	1cl2flbz (IS)
40.22	9382	2.5	50	0.50	O Xylene
40.35	12267	2.5	50	0.50	Styrene
41.55	8178	2.5	50	0.50	Isopropylbenzene
43.07	9132	2.5	50	0.50	n-propylbenzene
43.20	10020	2.5	50	0.50	Bromobenzene
43.68	22503	5.0	100	1.00	1,3,5-tmb/2-cl tol
43.93	10808	2.5	50	0.50	4-cl toluene
45.00	7102	2.5	50	0.50	t-butylbenzene
45.16	10347	2.5	50	0.50	1,2,4-tmb
45.81	8101	2.5	50	0.50	s-butylbenzene
46.32	8571	2.5	50	0.50	p-isopropyltoluene
46.70	9310	2.5	50	0.50	1,3-dcb
47.10	9648	2.5	50	0.50	1,4-dcb
47.85	8815	2.5	50	0.50	n-butylbenzene
48.48	8761	2.5	50	0.50	1,2-dcb
49.44	1610	0.0	0	0.00	
54.42	5143	2.5	50	0.50	1,2,4-tcb
54.96	5641	2.5	50	0.50	Hexachlorobutadiene
55.29	5511	2.5	50	0.50	Napthalene
56.12	4677	2.5	50	0.50	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.5 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:15

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.16	568	0.0	0	0.00	
5.92	1915	2.5	50	0.50	DCDFM
6.86	7622	2.5	50	0.50	CHLOROMETHANE
7.31	13727	2.5	50	0.50	VINYL CHLORIDE
7.50	5109	0.0	0	0.00	
7.90	431	0.0	0	0.00	
9.24	1547	2.5	50	0.50	BROMOMETHANE
9.63	9642	2.5	50	0.50	CHLOROETHANE
10.14	631	0.0	0	0.00	
10.31	705	0.0	0	0.00	
10.80	11985	2.5	50	0.50	TCFM
13.13	7505	2.5	50	0.50	FREON 113
13.99	11189	2.5	50	0.50	1,1-DCE
16.43	458209	2.5	50	0.50	METH CHLORIDE
17.71	10455	2.5	50	0.50	TRANS 1,2-DCE
19.65	11399	2.5	50	0.50	1,1-DCA
21.97	5324	2.5	50	0.50	2,2-DCPA
22.18	17492	2.5	50	0.50	CIS 1,2-DCE
22.79	19822	2.5	50	0.50	CHLOROFORM
23.43	4951	2.5	50	0.50	BCM
24.33	15221	2.5	50	0.50	1,1,1-TCA
24.95	10133	2.5	50	0.50	1,1-DCPE
25.30	16249	2.5	50	0.50	CARBON TET
25.92	10232	2.5	50	0.50	1,2-DCA
26.76	12533	0.0	0	0.00	
28.20	21555	2.5	50	0.50	TCE
28.88	12306	2.5	50	0.50	1,2-DCPA
29.71	6905	2.5	50	0.50	BRDCLMETHANE
29.93	2736	2.5	50	0.50	DIBROMOMETHANE
31.68	8942	2.5	50	0.50	CIS 1,3-DCPE
33.47	7061	2.5	50	0.50	TRANS 1,3-DCPE
34.04	9447	2.5	50	0.50	1,1,2-TCA
34.96	6711	2.5	50	0.50	1,3-DCPA
35.16	16863	2.5	50	0.50	PCE
35.93	2554	2.5	50	0.50	DIBRCLMETHANE
36.67	1168	2.5	50	0.50	1,2-DBEA (EDB)
37.62	9872	25.0	500	5.00	1CL4FBZ (SURR)
38.16	2870	2.5	50	0.50	CHLOROBENZENE
38.32	16972	2.5	50	0.50	1,1,1,2-PCA
39.01	531030	5.0	100	1.00	1CL2FBZ (IS)
41.68	309	2.5	50	0.50	BROMOFORM
42.25	6576	2.5	50	0.50	1,1,2,2-PCA
42.79	4369	2.5	50	0.50	1,2,3-TCPA
43.33	522	2.5	50	0.50	BROMOBENZENE
43.77	4146	2.5	50	0.50	2-CL TOLUENE

Continued...

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample TN : 05 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:15

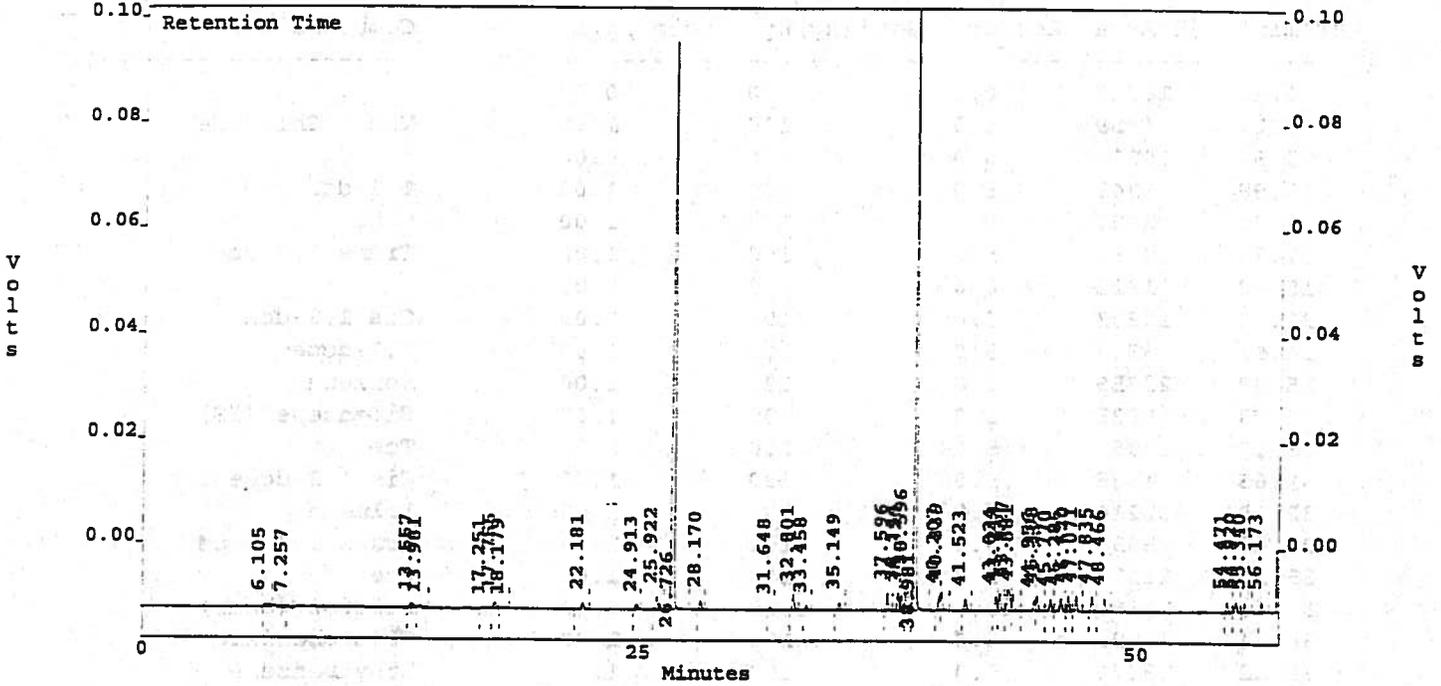
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
43.96	4847	2.5	50	0.50	4-CL TOLUENE
46.72	6071	2.5	50	0.50	1,3-DCB
47.13	6917	2.5	50	0.50	1,4-DCB
47.55	367	0.0	0	0.00	
48.51	7102	2.5	50	0.50	1,2-DCB
54.46	6367	2.5	50	0.50	1,2,4-TCB
54.89	14768	2.5	50	0.50	HEXAChLButADIENE
55.62	583	0.0	0	0.00	
56.14	5406	2.5	50	0.50	1,2,3-TCB

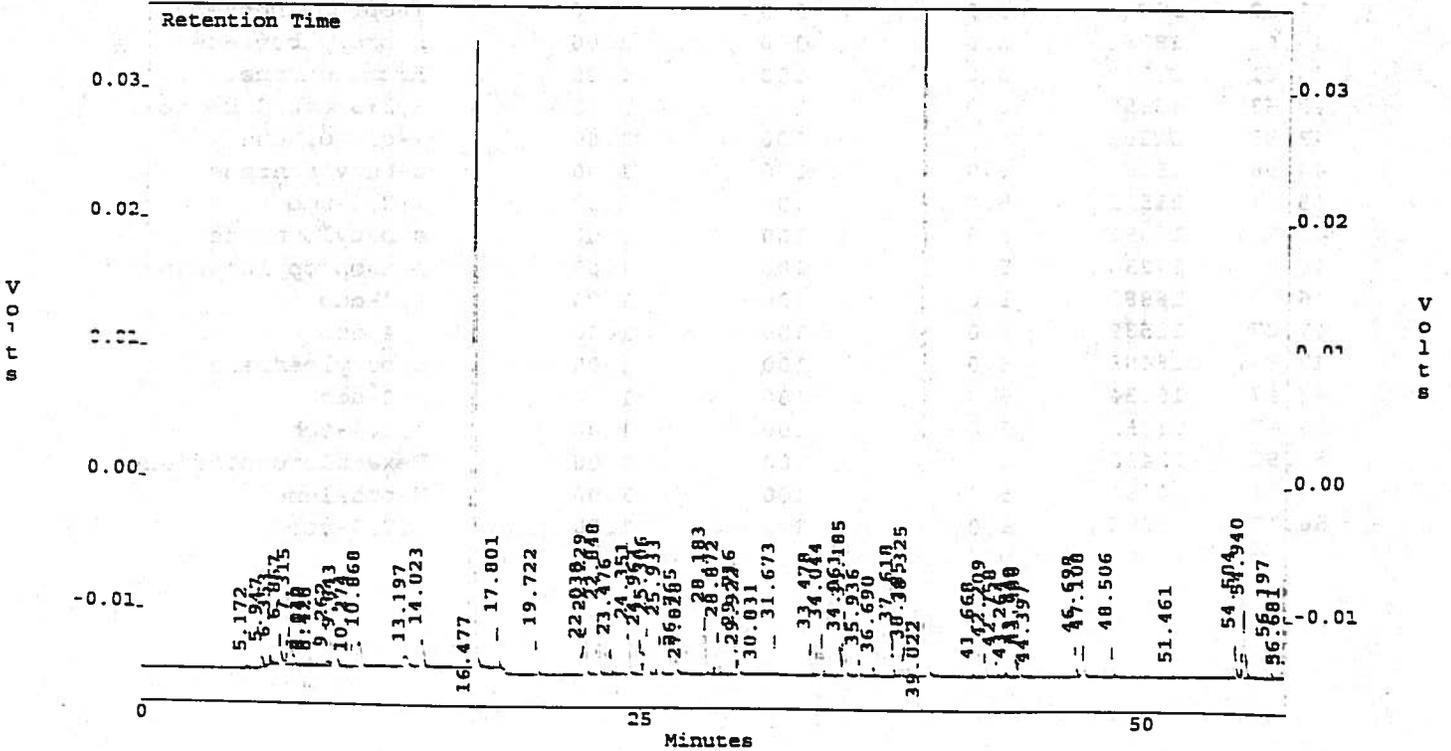
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.07
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 1.0 ppb 7
 Acquired : Jun 04, 1996 00:14:18
 Printed : Jun 04, 1996 17:03:29

c:\ezchrom\chrom\360603.07 -- Channel A



c:\ezchrom\chrom\360603.07 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.07
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 1.0 ppb 7
 Acquired : Jun 04, 1996 00:14:18
 Printed : Jun 04, 1996 17:03:32

Channel A Results

RT (min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
6.11	10011	0.0	0	0.00	
7.26	4859	5.0	100	1.00	Vinyl Chloride
13.56	10291	0.0	0	0.00	
13.98	5343	5.0	100	1.00	1,1-dce
17.25	3927	5.0	100	1.00	Mtbe
17.75	10668	5.0	100	1.00	Trans 1,2-dce
18.18	1921	0.0	0	0.00	
22.18	10883	5.0	100	1.00	Cis 1,2-dce
24.91	8507	5.0	100	1.00	1,1-dcpe
25.92	22759	5.0	100	1.00	Benzene
26.73	826885	5.0	100	1.00	Flbenzene (IS)
28.17	13351	5.0	100	1.00	Tce
31.65	4525	5.0	100	1.00	Cis 1,3-dcpe
32.80	22214	5.0	100	1.00	Toluene
33.46	5830	5.0	100	1.00	Trans 1,3-dcpe
35.15	11176	5.0	100	1.00	Pce
37.60	21690	50.0	1000	10.00	1cl4fbz (surr)
38.14	21896	5.0	100	1.00	Chlorobenzene
38.32	19871	5.0	100	1.00	Ethylbenzene
38.60	43262	10.0	200	2.00	M/P Xylene
38.98	760697	5.0	100	1.00	1cl2flbz (IS)
40.21	18529	5.0	100	1.00	O Xylene
40.34	24044	5.0	100	1.00	Styrene
41.52	16733	5.0	100	1.00	Isopropylbenzene
43.02	18352	5.0	100	1.00	n-propylbenzene
43.21	22040	5.0	100	1.00	Bromobenzene
43.63	45350	10.0	200	2.00	1,3,5-tmb/2-cl tol
43.88	21282	5.0	100	1.00	4-cl toluene
44.96	15304	5.0	100	1.00	t-butylbenzene
45.11	21512	5.0	100	1.00	1,2,4-tmb
45.77	16891	5.0	100	1.00	s-butylbenzene
46.29	17230	5.0	100	1.00	p-isopropyltoluene
46.67	18883	5.0	100	1.00	1,3-dcb
47.07	18539	5.0	100	1.00	1,4-dcb
47.84	18498	5.0	100	1.00	n-butylbenzene
48.47	16454	5.0	100	1.00	1,2-dcb
54.47	11352	5.0	100	1.00	1,2,4-tcb
54.92	12436	5.0	100	1.00	Hexachlorobutadiene
55.34	10881	5.0	100	1.00	Napthalene
56.17	11086	5.0	100	1.00	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.07
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 1.0 ppb 7
 Acquired : Jun 04, 1996 00:14:18
 Printed : Jun 04, 1996 17:03:32

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.17	2593	0.0	0	0.00	
5.95	8006	5.0	100	1.00	DCDFM
6.35	4227	0.0	0	0.00	
6.87	22808	5.0	100	1.00	CHLOROMETHANE
7.31	34107	5.0	100	1.00	VINYL CHLORIDE
8.03	528	0.0	0	0.00	
8.14	552	0.0	0	0.00	
9.12	352	0.0	0	0.00	
9.26	4142	5.0	100	1.00	BROMOMETHANE
9.64	23550	5.0	100	1.00	CHLOROETHANE
10.27	630	0.0	0	0.00	
10.87	29299	5.0	100	1.00	TCFM
13.20	16541	5.0	100	1.00	FREON 113
14.02	24765	5.0	100	1.00	1,1-DCE
16.48	509245	5.0	100	1.00	METH CHLORIDE
17.80	26065	5.0	100	1.00	TRANS 1,2-DCE
19.72	27253	5.0	100	1.00	1,1-DCA
22.04	14312	5.0	100	1.00	2,2-DCPA
22.23	40644	5.0	100	1.00	CIS 1,2-DCE
22.85	43562	5.0	100	1.00	CHLOROFORM
23.48	15841	5.0	100	1.00	BCM
24.35	36679	5.0	100	1.00	1,1,1-TCA
24.96	24379	5.0	100	1.00	1,1-DCPE
25.31	39352	5.0	100	1.00	CARBON TET
25.93	25966	5.0	100	1.00	1,2-DCA
26.77	11950	0.0	0	0.00	
27.03	1120	5.0	100	1.00	2-CL ETH VI ETH
28.18	38253	5.0	100	1.00	TCE
28.87	29722	5.0	100	1.00	1,2-DCPA
29.72	20229	5.0	100	1.00	BRDCLMETHANE
29.92	8893	5.0	100	1.00	DIBROMOMETHANE
30.83	762	0.0	0	0.00	
31.67	22069	5.0	100	1.00	CIS 1,3-DCPE
33.48	16918	5.0	100	1.00	TRANS 1,3-DCPE
34.04	24311	5.0	100	1.00	1,1,2-TCA
34.96	16306	5.0	100	1.00	1,3-DCPA
35.19	40582	5.0	100	1.00	PCE
35.94	8826	5.0	100	1.00	DIBRCLMETHANE
36.69	4494	5.0	100	1.00	1,2-DEEA (EDB)
37.62	21391	50.0	1000	10.00	1CL4FBZ (SURR)
38.19	6990	5.0	100	1.00	CHLOROBENZENE
38.33	41350	5.0	100	1.00	1,1,1,2-PCA
39.02	567683	5.0	100	1.00	1CL2FBZ (IS)
41.67	1975	5.0	100	1.00	BROMOFORM
42.21	14073	5.0	100	1.00	1,1,2,2-PCA

Continued...

File .. : c:\ezchrom\chrom\360603.07
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 1.0 ppb 7
 Acquired : Jun 04, 1996 00:14:18
 Printed : Jun 04, 1996 17:03:32

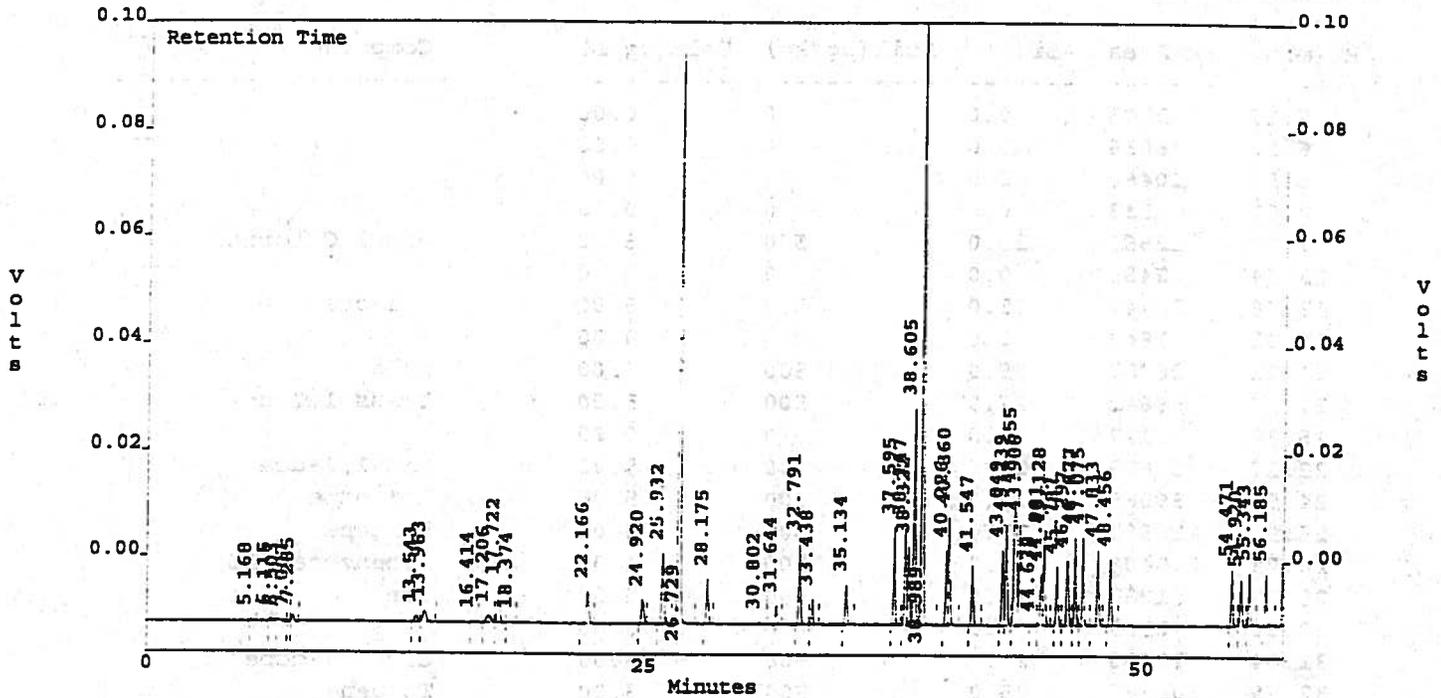
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
42.76	10120	5.0	100	1.00	1,2,3-TCPA
43.26	2295	5.0	100	1.00	BROMOBENZENE
43.74	9131	5.0	100	1.00	2-CL TOLUENE
43.91	11281	5.0	100	1.00	4-CL TOLUENE
44.40	554	0.0	0	0.00	
46.70	16035	5.0	100	1.00	1,3-DCB
47.11	18235	5.0	100	1.00	1,4-DCB
48.51	16966	5.0	100	1.00	1,2-DCB
51.46	609	5.0	100	1.00	1,2-DBr-3-CPA
54.50	16944	5.0	100	1.00	1,2,4-TCB
54.94	39091	5.0	100	1.00	HEXACL BUTADIENE
56.20	15523	5.0	100	1.00	1,2,3-TCB
56.68	404	0.0	0	0.00	

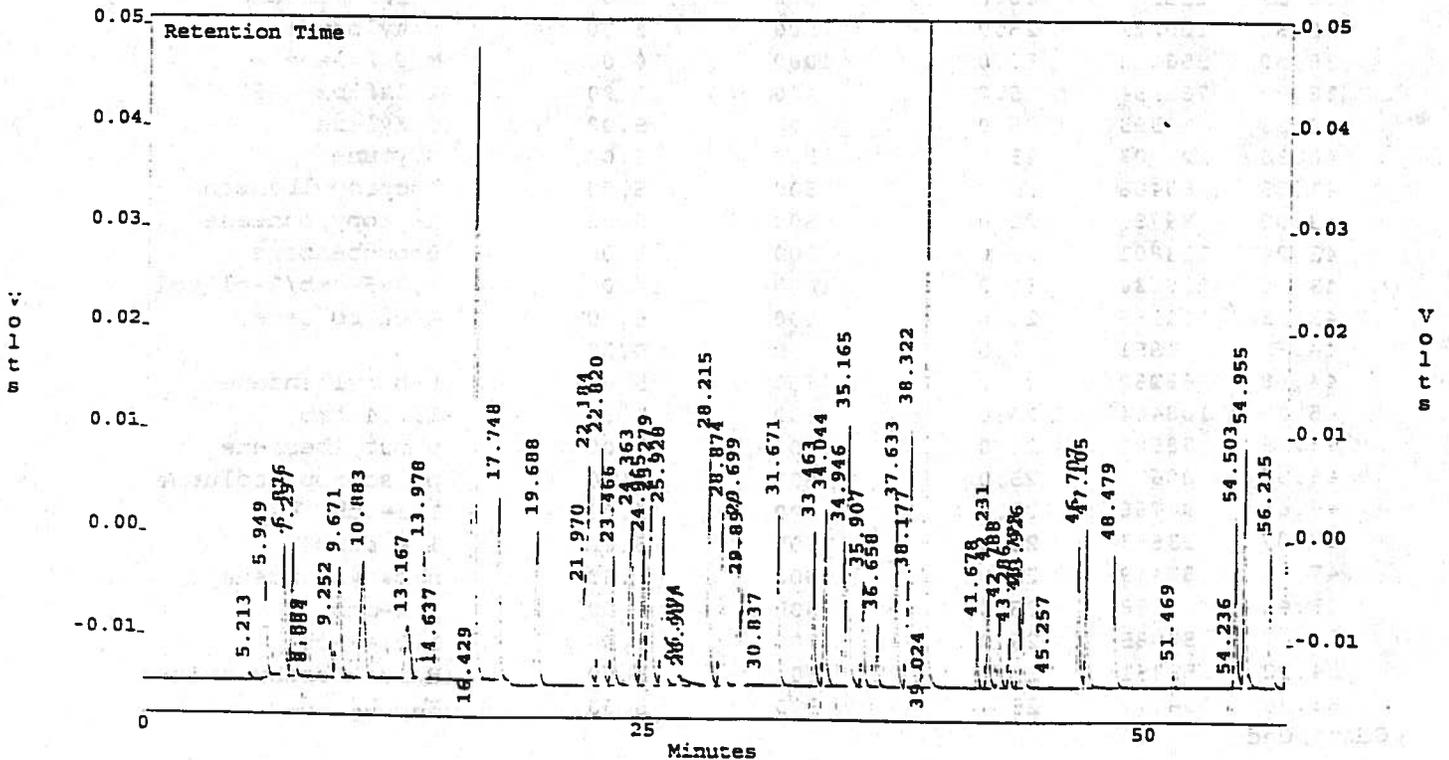
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.08
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 5.0 ppb 8
 Acquired : Jun 04, 1996 01:29:33
 Printed : Jun 04, 1996 17:03:47

c:\ezchrom\chrom\360603.08 -- Channel A



c:\ezchrom\chrom\360603.08 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.08
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 5.0 ppb 8
 Acquired : Jun 04, 1996 01:29:33
 Printed : Jun 04, 1996 17:03:49

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.17	2205	0.0	0	0.00	
6.12	8036	0.0	0	0.00	
6.50	10460	0.0	0	0.00	
7.01	3533	0.0	0	0.00	
7.28	12561	25.0	500	5.00	Vinyl Chloride
13.54	12453	0.0	0	0.00	
13.96	25747	25.0	500	5.00	1,1-dce
16.41	1842	0.0	0	0.00	
17.21	20987	25.0	500	5.00	Mtbe
17.72	56642	25.0	500	5.00	Trans 1,2-dce
18.37	2127	0.0	0	0.00	
22.17	50610	25.0	500	5.00	Cis 1,2-dce
24.92	39089	25.0	500	5.00	1,1-dcpe
25.93	110581	25.0	500	5.00	Benzene
26.73	820406	5.0	100	1.00	Flbenzene (IS)
28.17	61283	25.0	500	5.00	Tce
30.80	2569	0.0	0	0.00	
31.64	22490	25.0	500	5.00	Cis 1,3-dcpe
32.79	105387	25.0	500	5.00	Toluene
33.44	28707	25.0	500	5.00	Trans 1,3-dcpe
35.13	53407	25.0	500	5.00	Pce
37.59	109290	250.0	5000	50.00	1cl4fbz (surr)
38.15	111285	25.0	500	5.00	Chlorobenzene
38.32	100221	25.0	500	5.00	Ethylbenzene
38.60	256025	50.0	1000	10.00	M/P Xylene
38.99	762154	5.0	100	1.00	1cl2flbz (IS)
40.23	89393	25.0	500	5.00	O Xylene
40.36	123703	25.0	500	5.00	Styrene
41.55	80408	25.0	500	5.00	Isopropylbenzene
43.05	89786	25.0	500	5.00	n-propylbenzene
43.24	113801	25.0	500	5.00	Bromobenzene
43.66	250634	50.0	1000	10.00	1,3,5-tmb/2-cl tol
43.91	111255	25.0	500	5.00	4-cl toluene
44.64	1861	0.0	0	0.00	
44.98	68260	25.0	500	5.00	t-butylbenzene
45.13	108404	25.0	500	5.00	1,2,4-tmb
45.79	78506	25.0	500	5.00	s-butylbenzene
46.30	80670	25.0	500	5.00	p-isopropyltoluene
46.68	96768	25.0	500	5.00	1,3-dcb
47.07	93833	25.0	500	5.00	1,4-dcb
47.83	87449	25.0	500	5.00	n-butylbenzene
48.46	75358	25.0	500	5.00	1,2-dcb
54.47	57085	25.0	500	5.00	1,2,4-tcb
54.92	53351	25.0	500	5.00	Hexachlorobutadiene
55.34	54111	25.0	500	5.00	Naphthalene

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McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.08
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 5.0 ppb 8
 Acquired : Jun 04, 1996 01:29:33
 Printed : Jun 04, 1996 17:03:49

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
5.21	6978	0.0	0	0.00	
5.95	95655	25.0	500	5.00	DCDFM
6.88	123147	25.0	500	5.00	CHLOROMETHANE
7.30	130981	25.0	500	5.00	VINYL CHLORIDE
7.88	358	0.0	0	0.00	
8.08	576	0.0	0	0.00	
9.25	35836	25.0	500	5.00	BROMOMETHANE
9.67	145457	25.0	500	5.00	CHLOROETHANE
10.99	177491	25.0	500	5.00	TCFM
13.17	100085	25.0	500	5.00	FREON 113
13.98	162658	25.0	500	5.00	1,1-DCE
14.64	413	0.0	0	0.00	
16.43	706144	25.0	500	5.00	METH CHLORIDE
17.75	173956	25.0	500	5.00	TRANS 1,2-DCE
19.69	176774	25.0	500	5.00	1,1-DCA
21.97	78382	25.0	500	5.00	2,2-DCPA
22.18	251095	25.0	500	5.00	CIS 1,2-DCE
22.82	238105	25.0	500	5.00	CHLOROFORM
23.47	112877	25.0	500	5.00	BCM
24.36	196527	25.0	500	5.00	1,1,1-TCA
24.96	128663	25.0	500	5.00	1,1-DCPE
25.28	225321	25.0	500	5.00	CARBON TET
25.93	150548	25.0	500	5.00	1,2-DCA
26.77	12263	0.0	0	0.00	
26.99	17160	25.0	500	5.00	2-CL ETH VI ETH
28.21	201653	25.0	500	5.00	TCE
28.87	162018	25.0	500	5.00	1,2-DCPA
29.70	123379	25.0	500	5.00	BRDCLMETHANE
29.90	81637	25.0	500	5.00	DIBROMOMETHANE
30.84	2830	0.0	0	0.00	
31.67	128749	25.0	500	5.00	CIS 1,3-DCPE
33.46	108974	25.0	500	5.00	TRANS 1,3-DCPE
34.04	143576	25.0	500	5.00	1,1,2-TCA
34.95	96156	25.0	500	5.00	1,3-DCPA
35.17	228705	25.0	500	5.00	PCE
35.91	81307	25.0	500	5.00	DIBRCLMETHANE
36.66	45727	25.0	500	5.00	1,2-DBEA (EDB)
37.63	128979	250.0	5000	50.00	1CL4FBZ (SURR)
38.18	58018	25.0	500	5.00	CHLOROENZENE
38.32	232148	25.0	500	5.00	1,1,1,2-PCA
39.02	593539	5.0	100	1.00	1CL2FBZ (IS)
41.68	36443	25.0	500	5.00	BROMOFORM
42.23	83704	25.0	500	5.00	1,1,2,2-PCA
42.79	60577	25.0	500	5.00	1,2,3-TCPA
43.29	34666	25.0	500	5.00	BROMOENZENE

Continued...

File : c:\ezchrom\chrom\360603.08
Method : c:\ezchrom\chrom\3voa0603.met
Sample ID : 5.0 ppb 8
Acquired : Jun 04, 1996 01:29:33
Printed : Jun 04, 1996 17:03:49

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
43.77	54141	25.0	500	5.00	2-CL TOLUENE
43.93	74351	25.0	500	5.00	4-CL TOLUENE
45.26	1676	0.0	0	0.00	
46.71	102095	25.0	500	5.00	1,3-DCB
47.10	112877	25.0	500	5.00	1,4-DCB
48.48	96134	25.0	500	5.00	1,2-DCB
51.47	7840	25.0	500	5.00	1,2-DBr-3-CPA
54.24	654	0.0	0	0.00	
54.50	107143	25.0	500	5.00	1,2,4-TCB
54.96	189448	25.0	500	5.00	HEXACLBUTADIENE
56.21	100190	25.0	500	5.00	1,2,3-TCB

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File : c:\ezchrom\chrom\360603.09
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 10.0 ppb 9
 Acquired : Jun 04, 1996 02:42:23
 Printed : Jun 04, 1996 17:04:07

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil($\mu\text{g}/\text{kg}$)	Soln($\mu\text{g}/\text{L}$)	Compound
5.15	10216	0.0	0	0.00	
6.10	8179	0.0	0	0.00	
6.49	12173	0.0	0	0.00	
7.02	4466	0.0	0	0.00	
7.27	20650	50.0	1000	10.00	Vinyl Chloride
13.56	12165	0.0	0	0.00	
13.98	56229	50.0	1000	10.00	1,1-dce
16.45	3362	0.0	0	0.00	
17.24	44540	50.0	1000	10.00	Mtbe
17.75	125122	50.0	1000	10.00	Trans 1,2-dce
18.22	2912	0.0	0	0.00	
22.18	113940	50.0	1000	10.00	Cis 1,2-dce
24.91	86562	50.0	1000	10.00	1,1-dcpe
25.92	273734	50.0	1000	10.00	Benzene
26.72	823972	5.0	100	1.00	Flbenzene (IS)
28.16	134311	50.0	1000	10.00	Tce
30.81	4505	0.0	0	0.00	
31.65	47902	50.0	1000	10.00	Cis 1,3-dcpe
32.81	261772	50.0	1000	10.00	Toluene
33.46	62417	50.0	1000	10.00	Trans 1,3-dcpe
35.15	117355	50.0	1000	10.00	Pce
36.66	2111	0.0	0	0.00	
37.60	271268	500.0	10000	100.00	1cl4fbz (surr)
38.14	245846	50.0	1000	10.00	Chlorobenzene
38.31	194993	50.0	1000	10.00	Ethylbenzene
38.60	620288	100.0	2000	20.00	M/P Xylene
38.98	773407	5.0	100	1.00	1cl2flbz (IS)
40.21	222331	50.0	1000	10.00	O Xylene
40.34	338996	50.0	1000	10.00	Styrene
41.52	181825	50.0	1000	10.00	Isopropylbenzene
43.02	214446	50.0	1000	10.00	n-propylbenzene
43.21	283272	50.0	1000	10.00	Bromobenzene
43.62	614749	100.0	2000	20.00	1,3,5-tmb/2-cl tol
43.88	274084	50.0	1000	10.00	4-cl toluene
44.61	3069	0.0	0	0.00	
44.95	155347	50.0	1000	10.00	t-butylbenzene
45.10	260022	50.0	1000	10.00	1,2,4-tmb
45.77	177429	50.0	1000	10.00	s-butylbenzene
46.28	183523	50.0	1000	10.00	p-isopropyltoluene
46.66	222067	50.0	1000	10.00	1,3-dcb
47.06	223696	50.0	1000	10.00	1,4-dcb
47.83	197911	50.0	1000	10.00	n-butylbenzene
48.46	173193	50.0	1000	10.00	1,2-dcb
49.42	2055	0.0	0	0.00	
54.47	116504	50.0	1000	10.00	1,2,4-tcb

Continued...

File .. : c:\ezchrom\chrom\360603.09
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 10.0 ppb 9
 Acquired : Jun 04, 1996 02:42:23
 Printed : Jun 04, 1996 17:04:07

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil($\mu\text{g}/\text{kg}$)	Soln($\mu\text{g}/\text{L}$)	Compound
54.92	99293	50.0	1000	10.00	Hexachlorobutadiene
55.34	129160	50.0	1000	10.00	Napthalene
56.17	110387	50.0	1000	10.00	1,2,3-tcb

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File : c:\ezchrom\chrom\360603.09
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 10.0 ppb 9
 Acquired : Jun 04, 1996 02:42:23
 Printed : Jun 04, 1996 17:04:07

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
5.20	27087	0.0	0	0.00	
5.94	224552	50.0	1000	10.00	DCDFM
6.64	1507	0.0	0	0.00	
6.85	238722	50.0	1000	10.00	CHLOROMETHANE
7.06	11270	0.0	0	0.00	
7.31	319504	50.0	1000	10.00	VINYL CHLORIDE
7.97	827	0.0	0	0.00	
8.17	647	0.0	0	0.00	
9.24	105218	50.0	1000	10.00	BROMOMETHANE
9.64	355671	50.0	1000	10.00	CHLOROETHANE
10.88	472837	50.0	1000	10.00	TCFM
11.77	613	0.0	0	0.00	
13.19	245613	50.0	1000	10.00	FREON 113
14.01	396444	50.0	1000	10.00	1,1-DCE
16.47	979565	50.0	1000	10.00	METH CHLORIDE
17.78	399100	50.0	1000	10.00	TRANS 1,2-DCE
19.71	371585	50.0	1000	10.00	1,1-DCA
21.99	155182	50.0	1000	10.00	2,2-DCPA
22.21	536670	50.0	1000	10.00	CIS 1,2-DCE
22.83	506142	50.0	1000	10.00	CHLOROFORM
23.46	266835	50.0	1000	10.00	BCM
24.34	437434	50.0	1000	10.00	1,1,1-TCA
24.95	292240	50.0	1000	10.00	1,1-DCPE
25.29	515600	50.0	1000	10.00	CARBON TET
25.91	333290	50.0	1000	10.00	1,2-DCA
26.75	11937	0.0	0	0.00	
26.99	38711	50.0	1000	10.00	2-CL ETH VI ETH
28.20	444389	50.0	1000	10.00	TCE
28.86	374717	50.0	1000	10.00	1,2-DCPA
29.71	306434	50.0	1000	10.00	BRDCLMETHANE
29.91	213358	50.0	1000	10.00	DIBROMOMETHANE
30.83	4228	0.0	0	0.00	
31.70	304115	50.0	1000	10.00	CIS 1,3-DCPE
33.49	242982	50.0	1000	10.00	TRANS 1,3-DCPE
34.06	314287	50.0	1000	10.00	1,1,2-TCA
34.97	223331	50.0	1000	10.00	1,3-DCPA
35.19	496663	50.0	1000	10.00	PCE
35.93	197981	50.0	1000	10.00	DIBRCLMETHANE
36.66	116891	50.0	1000	10.00	1,2-DBEA (EDB)
37.63	281901	500.0	10000	100.00	1CL4FBZ (SURR)
38.20	101330	50.0	1000	10.00	CHLOROBENZENE
38.32	517986	50.0	1000	10.00	1,1,1,2-PCA
38.99	560592	5.0	100	1.00	1CL2FBZ (IS)
39.85	749	0.0	0	0.00	
41.63	97140	50.0	1000	10.00	BROMOFORM

Continued...

File : c:\ezchrom\chrom\360603.09
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 10.0 ppb 9
 Acquired : Jun 04, 1996 02:42:23
 Printed : Jun 04, 1996 17:04:07

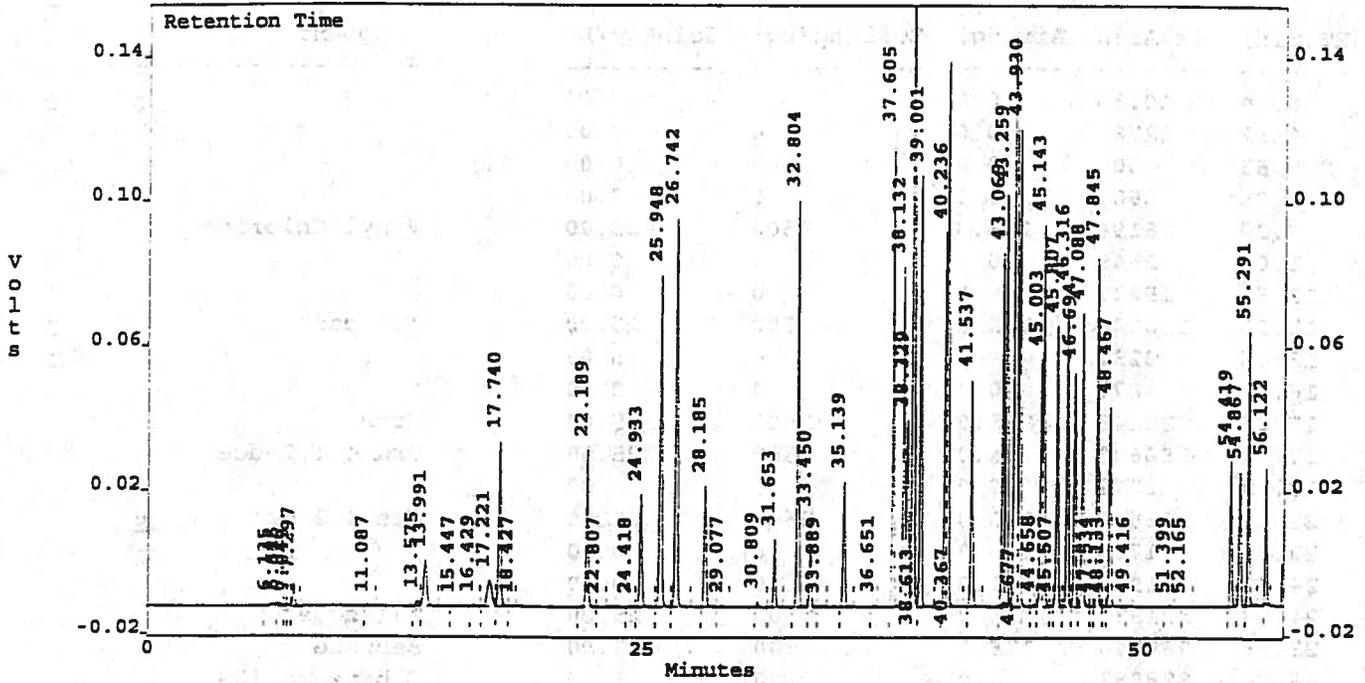
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
42.21	192014	50.0	1000	10.00	1,1,2,2-PCA
42.76	147507	50.0	1000	10.00	1,2,3-TCPA
43.25	94500	50.0	1000	10.00	BROMOBENZENE
43.73	121483	50.0	1000	10.00	2-CL TOLUENE
43.91	172783	50.0	1000	10.00	4-CL TOLUENE
44.60	1250	0.0	0	0.00	
44.90	697	0.0	0	0.00	
45.25	3937	0.0	0	0.00	
46.70	235749	50.0	1000	10.00	1,3-DCB
47.09	257759	50.0	1000	10.00	1,4-DCB
48.49	220832	50.0	1000	10.00	1,2-DCB
49.25	867	0.0	0	0.00	
51.47	27225	50.0	1000	10.00	1,2-DBr-3-CPA
54.23	1031	0.0	0	0.00	
54.50	216960	50.0	1000	10.00	1,2,4-TCB
54.95	344981	50.0	1000	10.00	HEXACLBUTADIENE
56.21	197274	50.0	1000	10.00	1,2,3-TCB

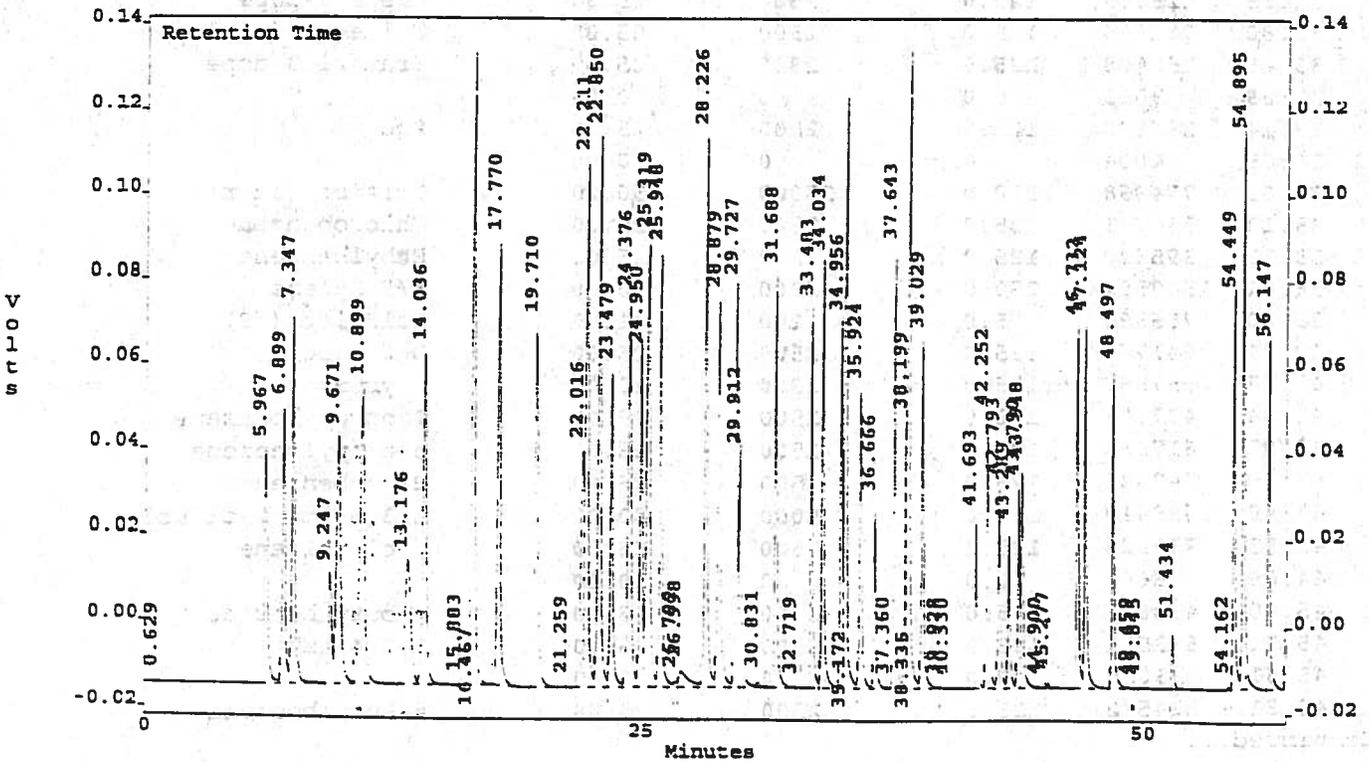
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.10
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 25.0 ppb 10
 Acquired : Jun 04, 1996 03:58:36
 Printed : Jun 04, 1996 17:04:23

c:\ezchrom\chrom\360603.10 -- Channel A



c:\ezchrom\chrom\360603.10 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.10
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 25.0 ppb 10
 Acquired : Jun 04, 1996 03:58:36
 Printed : Jun 04, 1996 17:04:25

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
6.14	10138	0.0	0	0.00	
6.52	12788	0.0	0	0.00	
6.83	4505	0.0	0	0.00	
7.05	5667	0.0	0	0.00	
7.30	48194	125.0	2500	25.00	Vinyl Chloride
11.09	2549	0.0	0	0.00	
13.57	15231	0.0	0	0.00	
13.57	150000	125.0	2500	25.00	1,1 dce
15.45	2232	0.0	0	0.00	
16.43	4877	0.0	0	0.00	
17.22	120145	125.0	2500	25.00	Mtbe
17.74	380600	125.0	2500	25.00	Trans 1,2-dce
18.43	2774	0.0	0	0.00	
22.19	338616	125.0	2500	25.00	Cis 1,2-dce
22.81	1714	0.0	0	0.00	
24.42	1912	0.0	0	0.00	
24.93	251831	125.0	2500	25.00	1,1-dcpe
25.95	769346	125.0	2500	25.00	Benzene
26.74	828883	5.0	100	1.00	Flbenzene (IS)
28.18	283545	125.0	2500	25.00	Tce
29.08	3395	0.0	0	0.00	
30.81	10815	0.0	0	0.00	
31.65	125733	125.0	2500	25.00	Cis 1,3-dcpe
32.80	761875	125.0	2500	25.00	Toluene
33.45	155008	125.0	2500	25.00	Trans 1,3-dcpe
33.89	3065	0.0	0	0.00	
35.14	266878	125.0	2500	25.00	Pce
36.65	4004	0.0	0	0.00	
37.60	774868	1250.0	25000	250.00	1cl4fbz (surr)
38.13	534533	125.0	2500	25.00	Chlorobenzene
38.33	395520	125.0	2500	25.00	Ethylbenzene
38.61	1540592	250.0	5000	50.00	M/P Xylene
39.00	785580	5.0	100	1.00	1cl2flbz (IS)
40.24	641764	125.0	2500	25.00	O Xylene
40.37	957867	125.0	2500	25.00	Styrene
41.54	407503	125.0	2500	25.00	Isopropylbenzene
43.07	617383	125.0	2500	25.00	n-propylbenzene
43.26	742322	125.0	2500	25.00	Bromobenzene
43.68	1699419	250.0	5000	50.00	1,3,5-tmb/2-cl tol
43.93	778326	125.0	2500	25.00	4-cl toluene
44.66	6660	0.0	0	0.00	
45.00	463015	125.0	2500	25.00	t-butylbenzene
45.14	653511	125.0	2500	25.00	1,2,4-tmb
45.51	3057	0.0	0	0.00	
45.81	524532	125.0	2500	25.00	s-butylbenzene

Continued...

File : c:\ezchrom\chrom\360603.10
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 25.0 ppb 10
 Acquired : Jun 04, 1996 03:58:36
 Printed : Jun 04, 1996 17:04:26

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
46.32	537744	125.0	2500	25.00	p-isopropyltoluene
46.69	455010	125.0	2500	25.00	1,3-dcb
47.09	521112	125.0	2500	25.00	1,4-dcb
47.53	2135	0.0	0	0.00	
47.84	575992	125.0	2500	25.00	n-butylbenzene
48.13	2310	0.0	0	0.00	
48.47	385958	125.0	2500	25.00	1,2-dcb
49.42	1882	0.0	0	0.00	
51.40	1643	0.0	0	0.00	
52.16	1745	0.0	0	0.00	
54.42	249738	125.0	2500	25.00	1,2,4-tcb
54.87	246209	125.0	2500	25.00	Hexachlorobutadiene
55.29	388417	125.0	2500	25.00	Napthalene
56.12	230861	125.0	2500	25.00	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.10
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 25.0 ppb 10
 Acquired : Jun 04, 1996 03:58:36
 Printed : Jun 04, 1996 17:04:26

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
0.63	364	0.0	0	0.00	
5.97	612904	125.0	2500	25.00	DCDFM
6.90	595031	125.0	2500	25.00	CHLOROMETHANE
7.35	854493	125.0	2500	25.00	VINYL CHLORIDE
9.25	303739	125.0	2500	25.00	BROMOMETHANE
9.67	904381	125.0	2500	25.00	CHLOROETHANE
10.90	1111706	125.0	2500	25.00	TCFM
13.18	605901	125.0	2500	25.00	FREON 113
14.04	1038086	125.0	2500	25.00	1,1-DCE
15.88	1262	0.0	0	0.00	
16.47	1657009	125.0	2500	25.00	METH CHLORIDE
17.77	1015348	125.0	2500	25.00	TRANS 1,2-DCE
19.71	991301	125.0	2500	25.00	1,1-DCA
21.26	2698	0.0	0	0.00	
22.02	542722	125.0	2500	25.00	2,2-DCPA
22.21	1242715	125.0	2500	25.00	CIS 1,2-DCE
22.85	1289551	125.0	2500	25.00	CHLOROFORM
23.48	665050	125.0	2500	25.00	BCM
24.38	1067111	125.0	2500	25.00	1,1,1-TCA
24.95	715795	125.0	2500	25.00	1,1-DCPE
25.32	1270896	125.0	2500	25.00	CARBON TET
25.95	860650	125.0	2500	25.00	1,2-DCA
26.78	15192	0.0	0	0.00	
27.00	126075	125.0	2500	25.00	2-CL ETH VI ETH
28.23	1100245	125.0	2500	25.00	TCE
28.88	893411	125.0	2500	25.00	1,2-DCPA
29.73	708385	125.0	2500	25.00	BRDICLMETHANE
29.91	485247	125.0	2500	25.00	DIBROMOMETHANE
30.83	15393	0.0	0	0.00	
31.69	715092	125.0	2500	25.00	CIS 1,3-DCPE
32.72	659	0.0	0	0.00	
33.48	601598	125.0	2500	25.00	TRANS 1,3-DCPE
34.03	793880	125.0	2500	25.00	1,1,2-TCA
34.96	575060	125.0	2500	25.00	1,3-DCPA
35.17	1194659	125.0	2500	25.00	PCE
35.92	549823	125.0	2500	25.00	DIBRCLMETHANE
36.67	309990	125.0	2500	25.00	1,2-DBEA (EDB)
37.36	1889	0.0	0	0.00	
37.64	730515	1250.0	25000	250.00	1CL4FBZ (SURR)
38.20	272142	125.0	2500	25.00	CHLORO BENZENE
38.34	1364068	125.0	2500	25.00	1,1,1,2-PCA
39.03	627335	5.0	100	1.00	1CL2FBZ (IS)
39.93	3131	0.0	0	0.00	
40.33	2183	0.0	0	0.00	
41.69	286385	125.0	2500	25.00	BROMOFORM

Continued...

File : c:\ezchrom\chrom\360603.10
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 25.0 ppb 10
 Acquired : Jun 04, 1996 03:58:36
 Printed : Jun 04, 1996 17:04:26

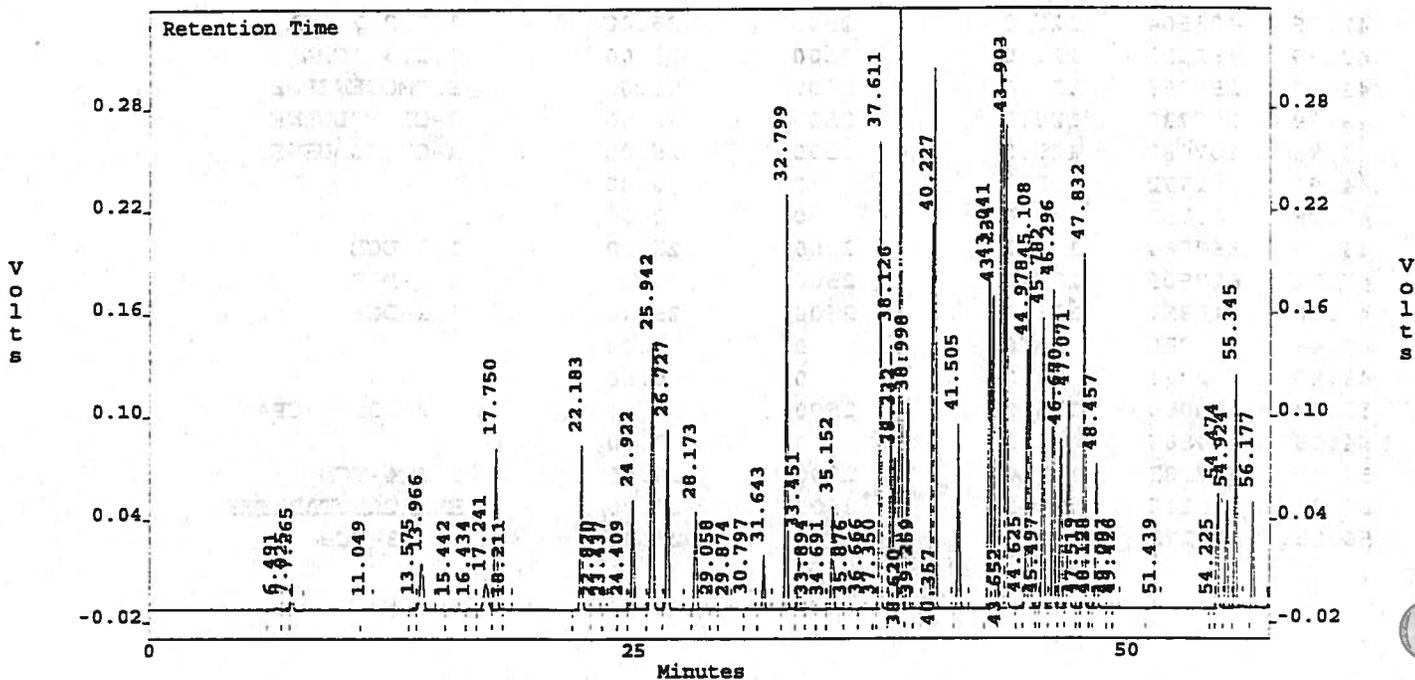
Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
42.25	485504	125.0	2500	25.00	1,1,2,2-PCA
42.79	362333	125.0	2500	25.00	1,2,3-TCPA
43.29	259065	125.0	2500	25.00	BROMOBENZENE
43.79	306730	125.0	2500	25.00	2-CL TOLUENE
43.95	407082	125.0	2500	25.00	4-CL TOLUENE
44.90	1772	0.0	0	0.00	
45.28	11353	0.0	0	0.00	
46.73	557564	125.0	2500	25.00	1,3-DCB
47.12	617909	125.0	2500	25.00	1,4-DCB
48.50	540857	125.0	2500	25.00	1,2-DCB
49.46	730	0.0	0	0.00	
49.85	2770	0.0	0	0.00	
51.43	90056	125.0	2500	25.00	1,2-DBr-3-CPA
54.16	4886	0.0	0	0.00	
54.45	587382	125.0	2500	25.00	1,2,4-TCB
54.90	570545	125.0	2500	25.00	HEXAChLOROCYCLOHEXANE
56.15	534122	125.0	2500	25.00	1,2,3-TCB

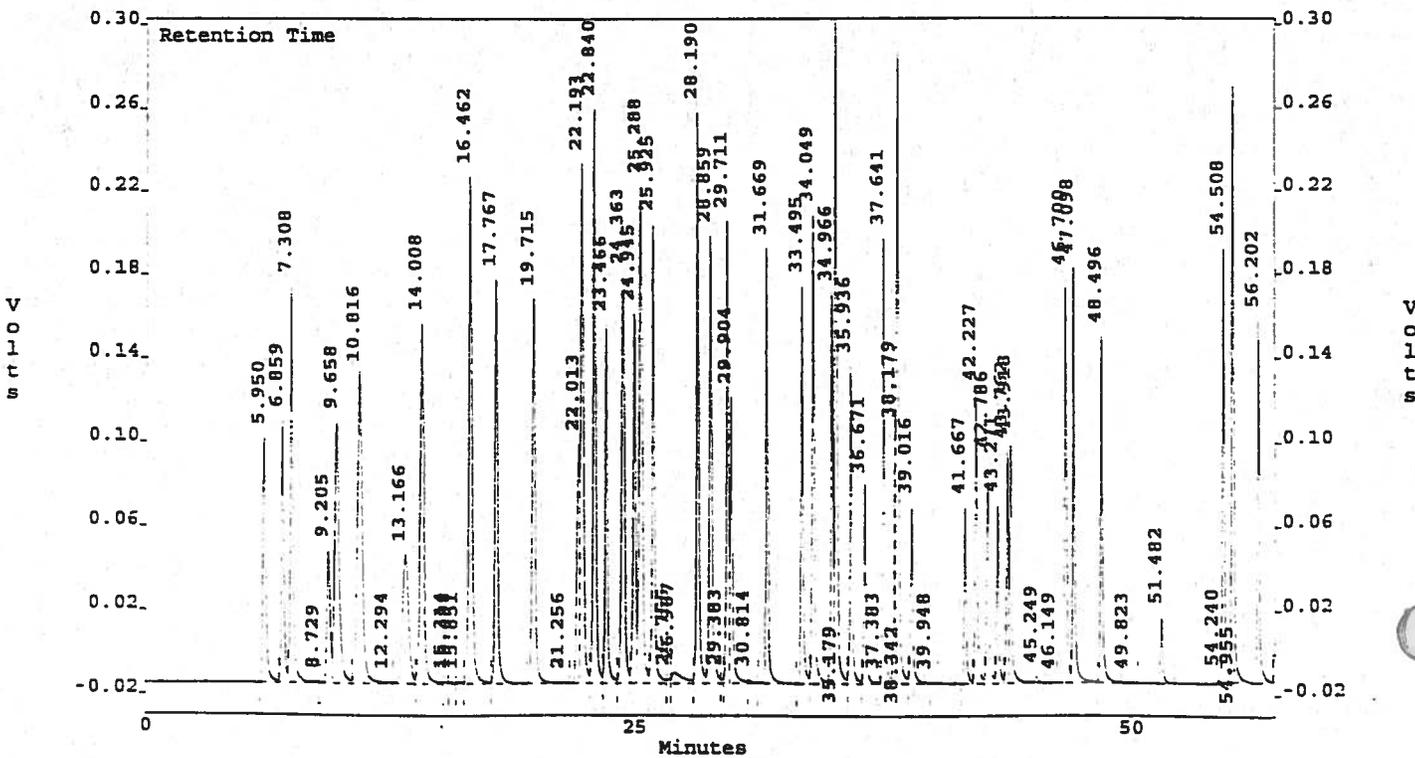
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.11
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 50.0 ppb 11
 Acquired : Jun 04, 1996 05:11:33
 Printed : Jun 04, 1996 17:04:41

c:\ezchrom\chrom\360603.11 -- Channel A



c:\ezchrom\chrom\360603.11 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.11
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 50.0 ppb 11
 Acquired : Jun 04, 1996 05:11:33
 Printed : Jun 04, 1996 17:04:44

Channel A Results

RT(min)	PK Area	Air(ng)	Soil($\mu\text{g}/\text{kg}$)	Soil($\mu\text{g}/\text{L}$)	Compound
6.49	28048	0.0	0	0.00	
7.03	23221	0.0	0	0.00	
7.27	108727	250.0	5000	50.00	Vinyl Chloride
11.05	6855	0.0	0	0.00	
13.57	15973	0.0	0	0.00	
13.97	330076	250.0	5000	50.00	1,1-dce
15.44	9000	0.0	0	0.00	
16.43	8179	0.0	0	0.00	
17.24	245210	250.0	5000	50.00	Mtbe
17.75	818849	250.0	5000	50.00	Trans 1,2-dce
18.21	5088	0.0	0	0.00	
22.18	774698	250.0	5000	50.00	Cis 1,2-dce
22.82	3056	0.0	0	0.00	
23.44	2202	0.0	0	0.00	
24.41	3876	0.0	0	0.00	
24.92	557723	250.0	5000	50.00	1,1-dcpe
25.94	1422706	250.0	5000	50.00	Benzene
26.73	811964	5.0	100	1.00	Flbenzene (IS)
28.17	492471	250.0	5000	50.00	Tce
29.06	6126	0.0	0	0.00	
29.87	3856	0.0	0	0.00	
30.80	9410	0.0	0	0.00	
31.64	227138	250.0	5000	50.00	Cis 1,3-dcpe
32.80	1692065	250.0	5000	50.00	Toluene
33.45	268458	250.0	5000	50.00	Trans 1,3-dcpe
33.89	5440	0.0	0	0.00	
34.69	1534	0.0	0	0.00	
35.15	481795	250.0	5000	50.00	Pce
35.66	1524	0.0	0	0.00	
36.67	7209	0.0	0	0.00	
37.35	1624	0.0	0	0.00	
37.61	1668397	2500.0	50000	500.00	1cl4fbz (surr)
38.13	936934	250.0	5000	50.00	Chlorobenzene
38.33	673652	250.0	5000	50.00	Ethylbenzene
38.62	2751692	500.0	10000	100.00	M/P Xylene
39.00	789482	5.0	100	1.00	1cl2flbz (IS)
39.26	3317	0.0	0	0.00	
40.23	1407541	250.0	5000	50.00	O Xylene
40.36	2004294	250.0	5000	50.00	Styrene
41.51	728849	250.0	5000	50.00	Isopropylbenzene
43.04	1296702	250.0	5000	50.00	n-propylbenzene
43.23	1325853	250.0	5000	50.00	Bromobenzene
43.65	3639070	500.0	10000	100.00	1,3,5-tmb/2-cl tol
43.90	1694618	250.0	5000	50.00	4-cl toluene
44.63	12697	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\360603.11
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 50.0 ppb 11
 Acquired : Jun 04, 1996 05:11:33
 Printed : Jun 04, 1996 17:04:44

Channel A Results

RT(min)	Pk Area	Air (ng)	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{L}$)	Compound
44.98	1036786	250.0	5000	50.00	t-butylbenzene
45.11	1212734	250.0	5000	50.00	1,2,4-tmb
45.50	6565	0.0	0	0.00	
45.78	1177498	250.0	5000	50.00	s-butylbenzene
46.30	1198551	250.0	5000	50.00	p-isopropyltoluene
46.67	737420	250.0	5000	50.00	1,3-dcb
47.07	853564	250.0	5000	50.00	1,4-dcb
47.52	4030	0.0	0	0.00	
47.83	1270120	250.0	5000	50.00	n-butylbenzene
48.13	4696	0.0	0	0.00	
48.46	631275	250.0	5000	50.00	1,2-dcb
49.09	3222	0.0	0	0.00	
49.43	3322	0.0	0	0.00	
51.44	3028	0.0	0	0.00	
54.22	1624	0.0	0	0.00	
54.47	419767	250.0	5000	50.00	1,2,4-tcb
54.92	431998	250.0	5000	50.00	Hexachlorobutadiene
55.34	731839	250.0	5000	50.00	Napthalene
56.18	411214	250.0	5000	50.00	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.11
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 50.0 ppp 11
 Acquired : Jun 04, 1996 05:11:33
 Printed : Jun 04, 1996 17:04:44

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
5.95	1265019	250.0	5000	50.00	DCDFM
6.86	1072071	250.0	5000	50.00	CHLOROMETHANE
7.31	1730308	250.0	5000	50.00	VINYL CHLORIDE
8.73	3360	0.0	0	0.00	
9.21	727051	250.0	5000	50.00	BROMOMETHANE
9.66	1933806	250.0	5000	50.00	CHLOROETHANE
10.82	2535704	250.0	5000	50.00	TCFM
12.29	9897	0.0	0	0.00	
13.17	1353112	250.0	5000	50.00	FREON 113
14.01	2272962	250.0	5000	50.00	1,1-DCE
15.31	12207	0.0	0	0.00	
15.50	16128	0.0	0	0.00	
15.85	16442	0.0	0	0.00	
16.46	2792012	250.0	5000	50.00	METH CHLORIDE
17.77	2021363	250.0	5000	50.00	TRANS 1,2-DCE
19.72	2063861	250.0	5000	50.00	1,1-DCA
21.26	5743	0.0	0	0.00	
22.01	1048600	250.0	5000	50.00	2,2-DCPA
22.19	2617538	250.0	5000	50.00	CIS 1,2-DCE
22.84	2644805	250.0	5000	50.00	CHLOROFORM
23.47	1432334	250.0	5000	50.00	BCM
24.36	2292345	250.0	5000	50.00	1,1,1-TCA
24.95	1582655	250.0	5000	50.00	1,1-DCPE
25.29	2748181	250.0	5000	50.00	CARBON TET
25.93	1840713	250.0	5000	50.00	1,2-DCA
26.76	24445	0.0	0	0.00	
26.99	193410	250.0	5000	50.00	2-CL ETH VI ETH
28.19	2275740	250.0	5000	50.00	TCE
28.86	1925641	250.0	5000	50.00	1,2-DCPA
29.38	14828	0.0	0	0.00	
29.71	1676031	250.0	5000	50.00	BRDCLMETHANE
29.90	1137243	250.0	5000	50.00	DIBROMOMETHANE
30.81	22423	0.0	0	0.00	
31.67	1563143	250.0	5000	50.00	CIS 1,3-DCPE
33.49	1323699	250.0	5000	50.00	TRANS 1,3-DCPE
34.05	1830700	250.0	5000	50.00	1,1,2-TCA
34.97	1265123	250.0	5000	50.00	1,3-DCPA
35.18	2596228	250.0	5000	50.00	PCE
35.94	1160687	250.0	5000	50.00	DIBRCLMETHANE
36.67	698938	250.0	5000	50.00	1,2-DBEA (EDB)
37.38	4345	0.0	0	0.00	
37.64	1518055	2500.0	50000	500.00	1CL4FBZ (SURR)
38.18	554886	250.0	5000	50.00	CHLOROBENZENE
38.34	2731850	250.0	5000	50.00	1,1,1,2-PCA
39.02	671429	5.0	100	1.00	1CL2FBZ (IS)

Continued...

File .. : c:\ezchrom\chrom\360603.11
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 50.0 ppb 11
 Acquired : Jun 04, 1996 05:11:33
 Printed : Jun 04, 1996 17:04:44

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
39.95	3385	0.0	0	0.00	
41.67	636884	250.0	5000	50.00	BROMOFORM
42.23	1055111	250.0	5000	50.00	1,1,2,2-PCA
42.79	795558	250.0	5000	50.00	1,2,3-TCPA
43.27	589983	250.0	5000	50.00	BROMOBENZENE
43.76	739491	250.0	5000	50.00	2-CL TOLUENE
43.92	907306	250.0	5000	50.00	4-CL TOLUENE
45.25	34223	0.0	0	0.00	
46.15	1269	0.0	0	0.00	
46.70	1284510	250.0	5000	50.00	1,3-DCB
47.10	1401105	250.0	5000	50.00	1,4-DCB
48.50	1250905	250.0	5000	50.00	1,2-DCB
49.82	3493	0.0	0	0.00	
51.48	224351	250.0	5000	50.00	1,2-DBr-3-CPA
54.24	13076	0.0	0	0.00	
54.51	1254557	250.0	5000	50.00	1,2,4-TCB
54.96	2016313	250.0	5000	50.00	HEXACHLORBTADIENE
56.20	1146508	250.0	5000	50.00	1,2,3-TCB

Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:03

Channel : A

Peak : Vinyl Chloride

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0077	0.4	0.01921	0.0077*							0
2	0.0059	0.5	0.01187	0.0059							0
3	0.0064	1	0.006388	0.0064							0
4	0.0165	5	0.003296	0.0165							0
5	0.0267	10	0.00267	0.0267							0
6	0.0613	25	0.002454	0.0613							0
7	0.1377	50	0.002754	0.1377							0

Calib Flag: Replace

Average RF: 0.00490497

RF StdDev: 0.00371198

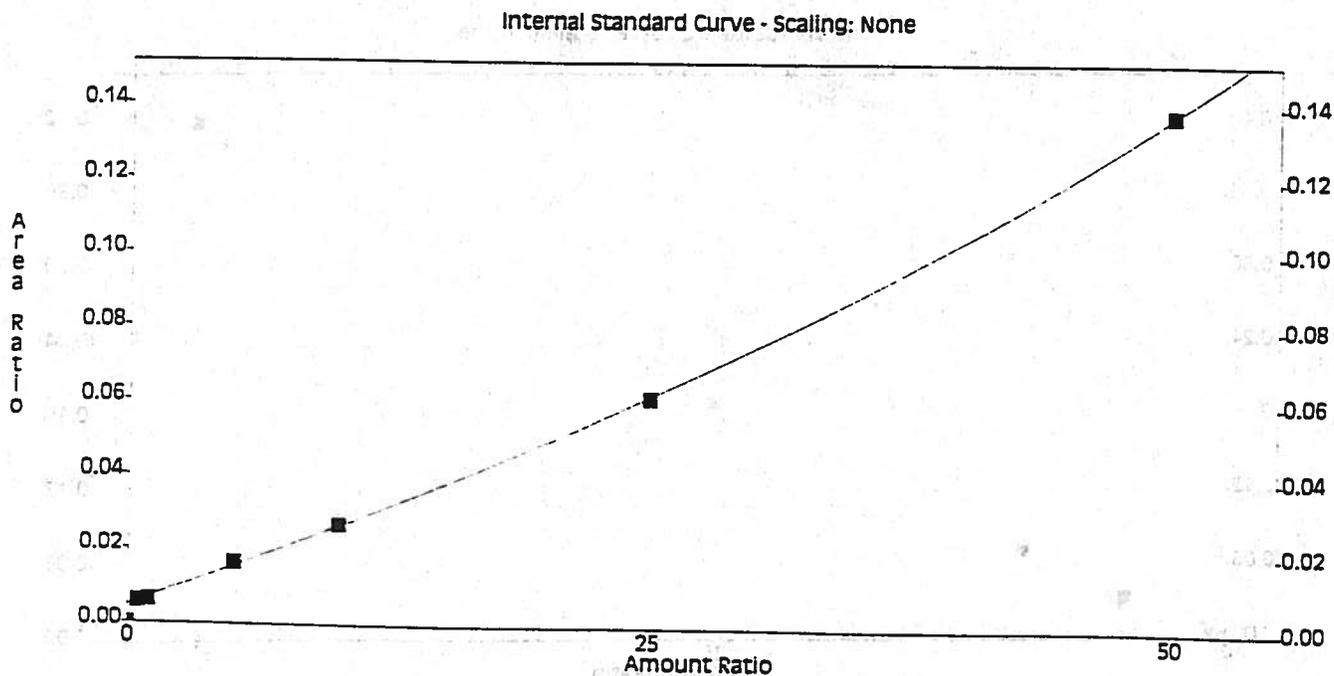
RF %RSD: 75.678

RF Definition: Area / Amount

Sighting Method: None

Fit Through Zero: No

Quadratic Fit: Amount = -826.81 x Area^2 + 495.164 x Area - 2.4806
R^2 = 0.999781 ✓



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:03

Channel : A

Peak : 1,1-dce

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0026	0.4	0.006549	0.0026							0
2	0.0033	0.5	0.006675	0.0033							0
3	0.0070	1	0.007024	0.0070							0
4	0.0338	5	0.006756	0.0338							0
5	0.0727	10	0.00727	0.0727							0
6	0.1922	25	0.007688	0.1922							0
7	0.4181	50	0.008362	0.4181							0

Calib Flag: Replace

Average RF: 0.0071892

RF StdDev: 0.000647911

RF %RSD: 9.01228

RF Definition: Area / Amount

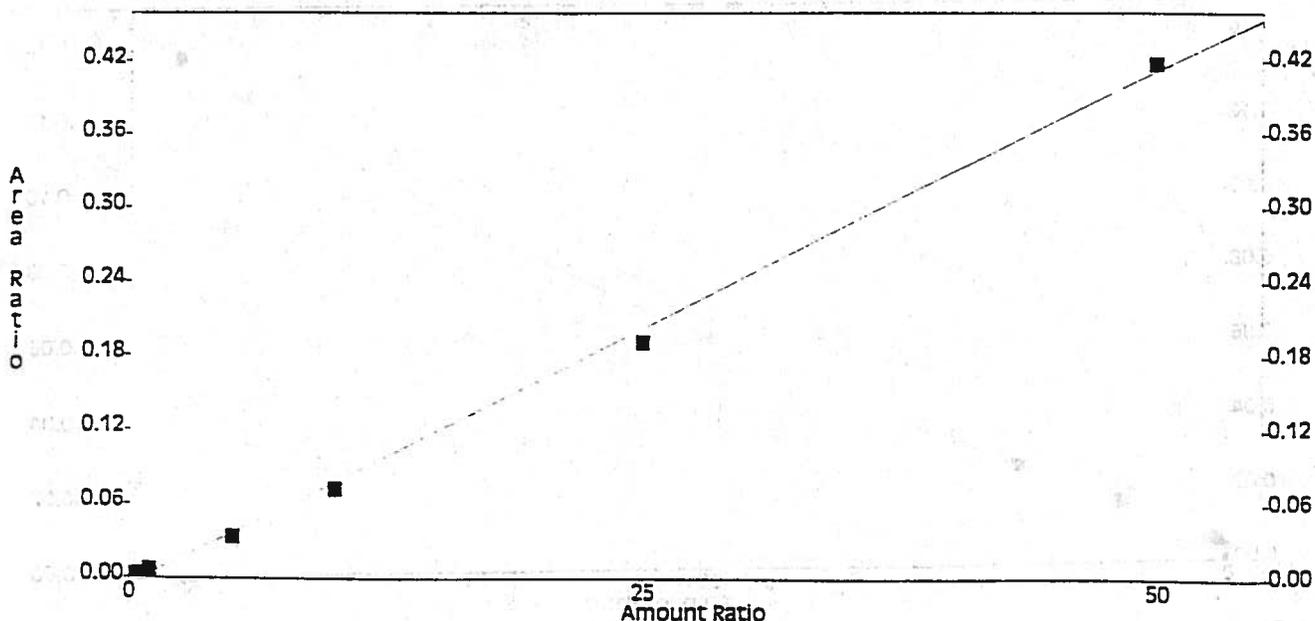
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 119.829 x Area + 0.636352

R² = 0.998209 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:03

Channel : A

Peak : Mtbe

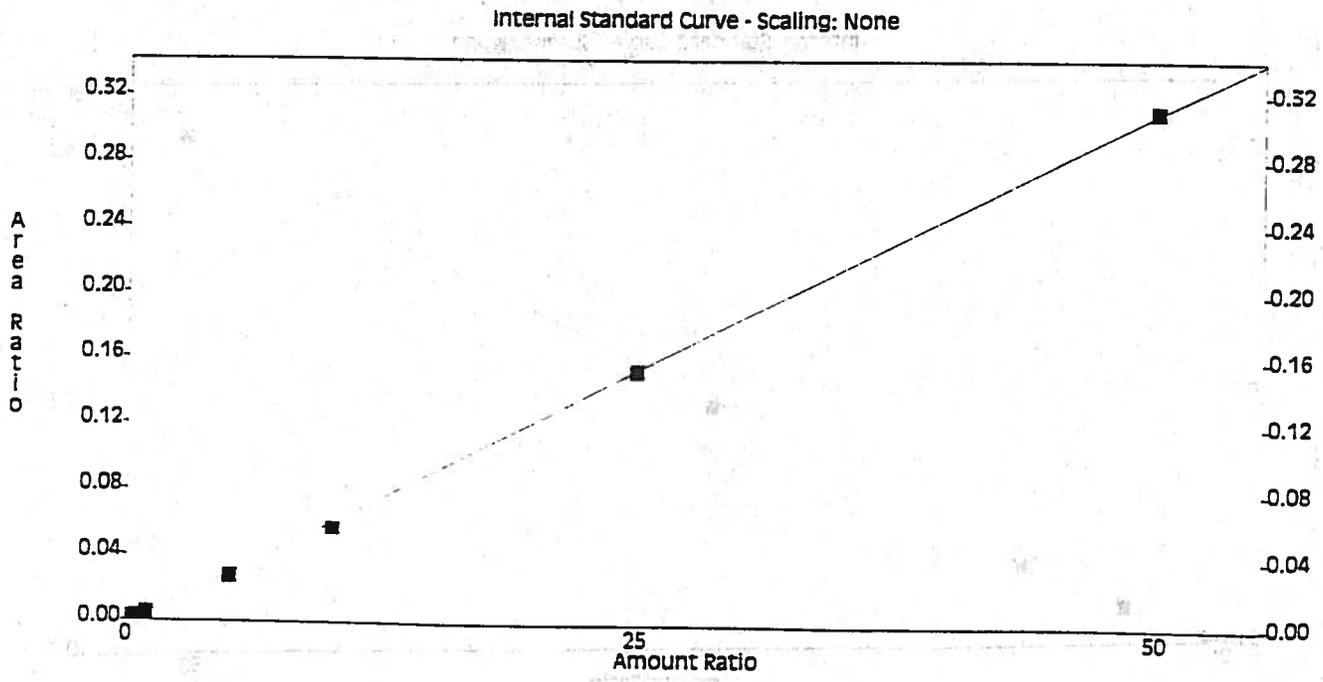
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0021	0.4	0.005215	0.0021							0
2	0.0031	0.5	0.006212	0.0031							0
3	0.0052	1	0.005162	0.0052							0
4	0.0275	5	0.005507	0.0275							0
5	0.0576	10	0.005759	0.0576							0
6	0.1529	25	0.006118	0.1529							0
7	0.3106	50	0.006212	0.3106							0

Calib Flag: Replace

Average RF: 0.00574072
RF StdDev: 0.000456804
RF %RSD: 7.95725

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 160.53 x/Area + 0.30878
R² = 0.999759 ✓



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:04

Channel : A

Peak : Trans 1,2-dce

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0056	0.4	0.01397	0.0056							0
2	0.0074	0.5	0.01482	0.0074							0
3	0.0140	1	0.01402	0.0140							0
4	0.0743	5	0.01486	0.0743							0
5	0.1618	10	0.01618	0.1618							0
6	0.4845	25	0.01938	0.4845							0
7	1.0372	50	0.02074	1.0372							0

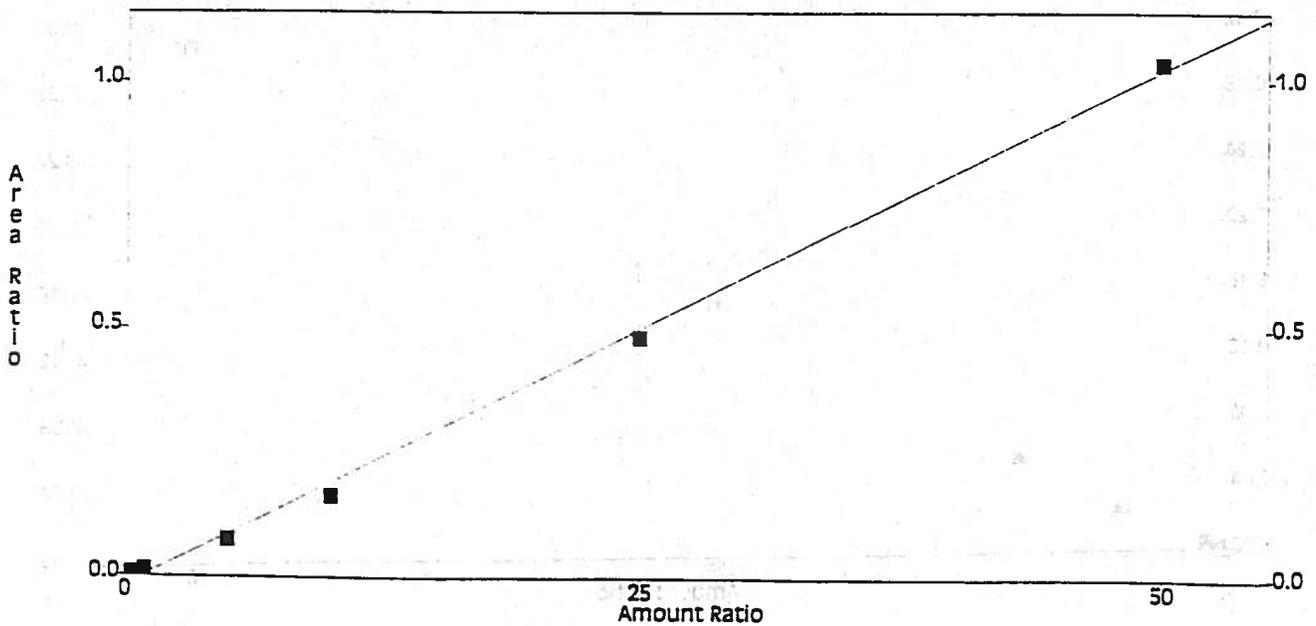
Calib Flag: Replace

Average RF: 0.0162822
RF StdDev: 0.00271174
RF %RSD: 16.6547

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 47.948 x Area + 0.903216
R² = 0.997685 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:04

Channel : A

Peak : Cis 1,2-dce

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0055	0.4	0.01369	0.0055							0
2	0.0071	0.5	0.01427	0.0071							0
3	0.0143	1	0.01431	0.0143							0
4	0.0664	5	0.01328	0.0664							0
5	0.1473	10	0.01473	0.1473							0
6	0.4310	25	0.01724	0.4310							0
7	0.9813	50	0.01963	0.9813							0

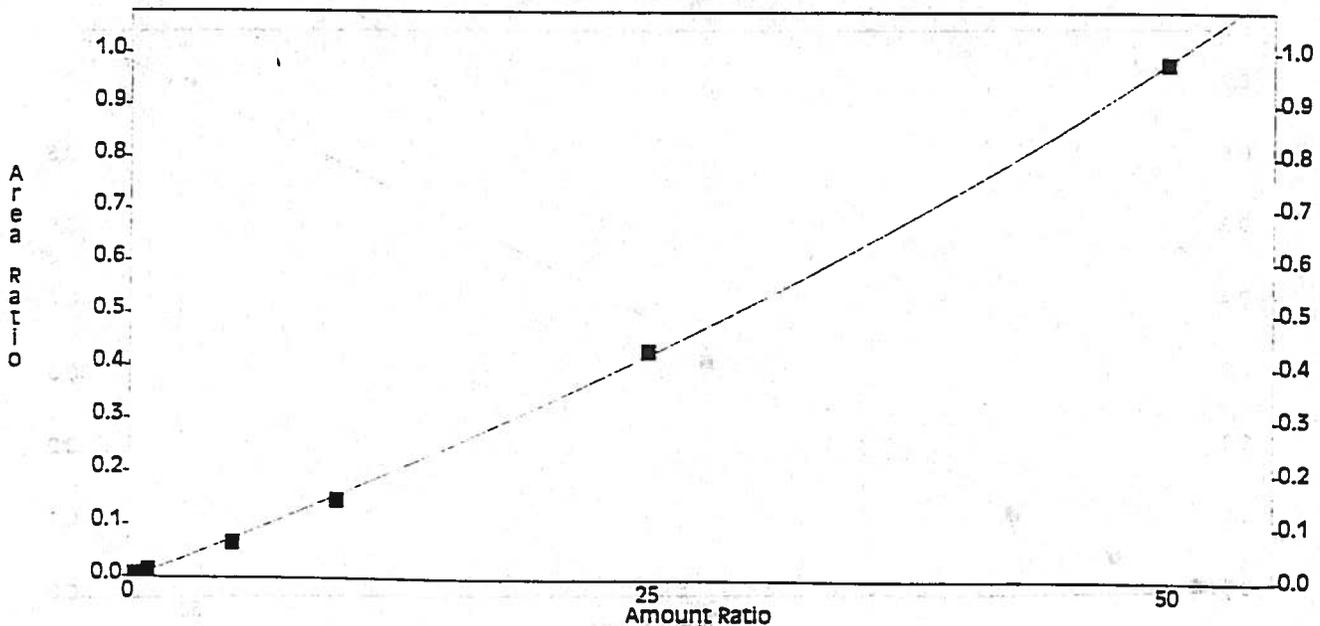
Calib Flag: Replace

average RF: 0.0153073
 F StdDev: 0.00229147
 RF %RSD: 14.9698

RF Definition: Area / Amount
 Weighting Method: None
 Int Through Zero: No

Quadratic Fit: Amount = -13.8356 x Area^2 + 64.1642 x Area + 0.299611
 R^2 = 0.99957

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:04

Channel : A

Peak : 1,1-dcpe

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0043	0.4	0.01078	0.0043							0
2	0.0057	0.5	0.01141	0.0057							0
3	0.0112	1	0.01118	0.0112							0
4	0.0513	5	0.01026	0.0513							0
5	0.1119	10	0.01119	0.1119							0
6	0.3206	25	0.01282	0.3206							0
7	0.7064	50	0.01413	0.7064							0

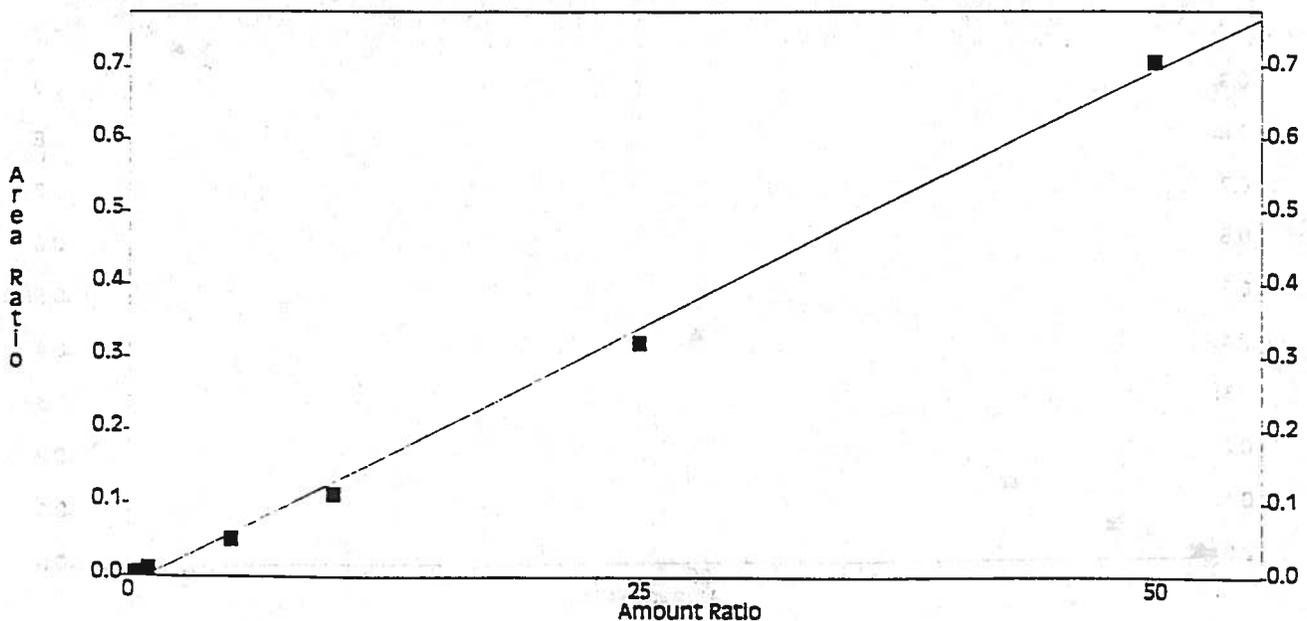
Calib Flag: Replace

Average RF: 0.0116816
RF StdDev: 0.00133523
RF %RSD: 11.4302

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 70.731 x Area + 0.887891
R² = 0.996978 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

Printed : Jun 04, 1996 17:06:05

Channel : A

Peak : Benzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0116	0.4	0.0291	0.0116							0
2	0.0150	0.5	0.02999	0.0150							0
3	0.0299	1	0.02992	0.0299							0
4	0.1451	5	0.02992	0.1451							0
5	0.3539	10	0.03539	0.3539							0
6	0.9793	25	0.03917	0.9793							0
7	1.8021	50	0.03604	1.8021							0

Calib Flag: Replace

Average RF: 0.032661

RF StdDev: 0.00412232

RF %RSD: 12.6215

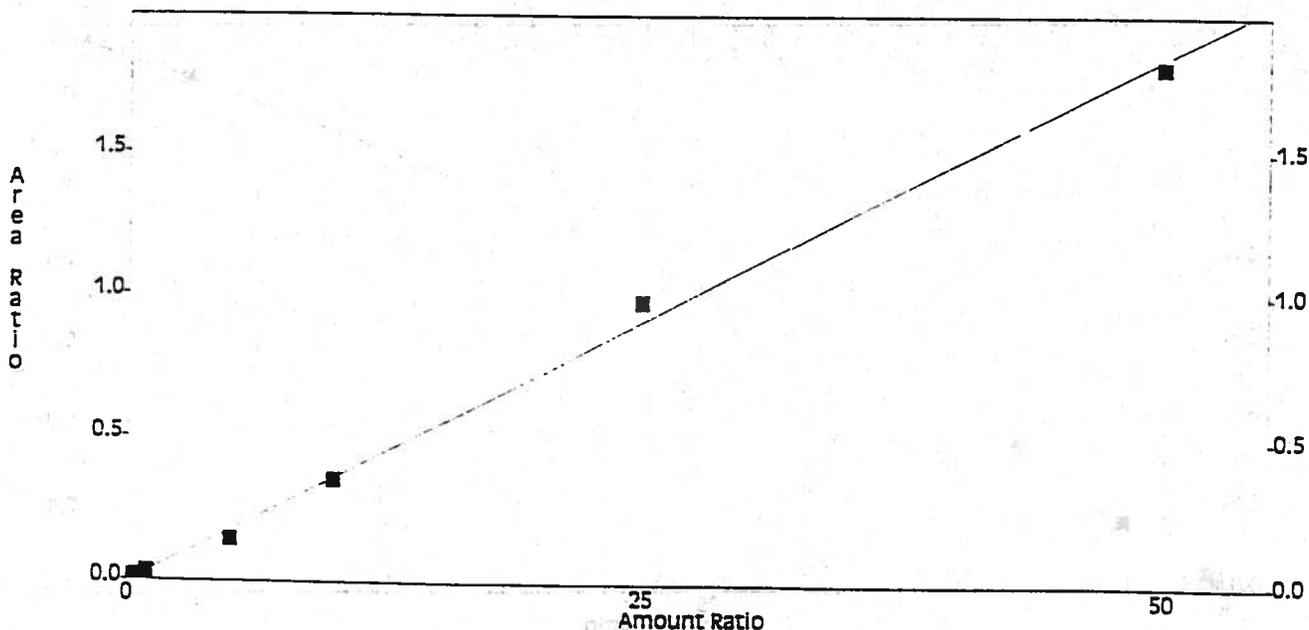
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 27.1713 * Area + 0.175712
 $R^2 = 0.997671$

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:05

Channel : A

Peak : Tce

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0069	0.4	0.01721	0.0069							0
2	0.0119	0.5	0.02374	0.0119							0
3	0.0176	1	0.01755	0.0176							0
4	0.0804	5	0.01608	0.0804							0
5	0.1737	10	0.01737	0.1737							0
6	0.3609	25	0.01444	0.3609							0
7	0.6238	50	0.01248	0.6238							0

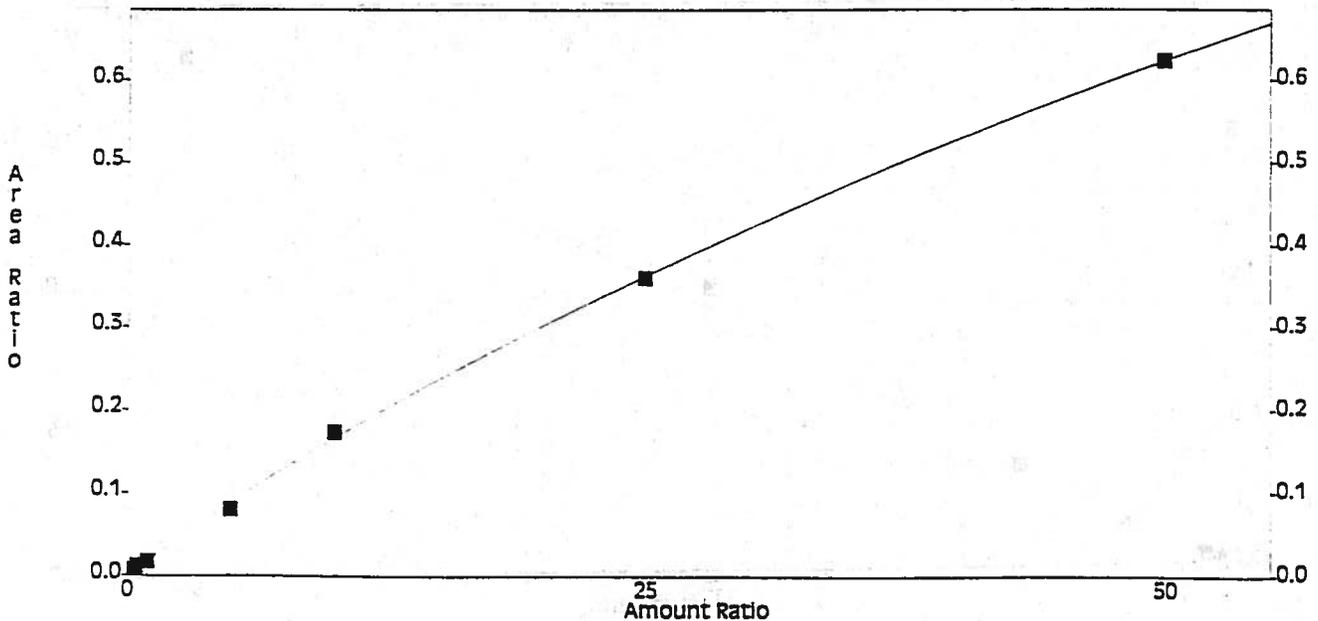
Calib Flag: Replace

Average RF: 0.0169806
RF StdDev: 0.00350797
RF %RSD: 20.6587

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Quadratic Fit: Amount = 44.0995 x Area² + 52.6651 x Area + 0.0292686
R² = 0.999739 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:06

Channel : A

Peak : Cis 1,3-dcpe

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0023	0.4	0.005838	0.0023							0
2	0.0031	0.5	0.006273	0.0031							0
3	0.0059	1	0.005948	0.0059							0
4	0.0295	5	0.005902	0.0295							0
5	0.0619	10	0.006194	0.0619							0
6	0.1601	25	0.006402	0.1601							0
7	0.2877	50	0.005754	0.2877							0

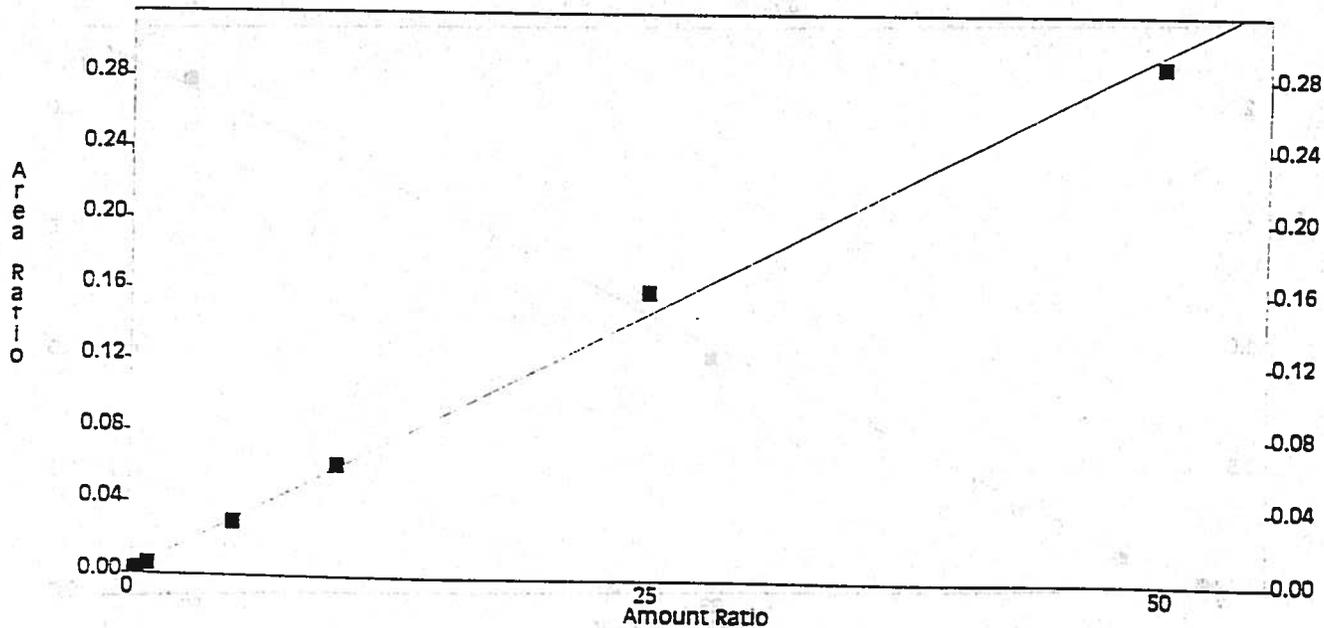
Calib Flag: Replace

Average RF: 0.00604434
RF StdDev: 0.000244568
RF %RSD: 4.04624

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 170.872 x Area - 0.312212
R² = 0.997125 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:06

Channel : A

Peak : Toluene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0129	0.4	0.03225	0.0129							0
2	0.0160	0.5	0.032	0.0160							0
3	0.0292	1	0.0292	0.0292							0
4	0.1383	5	0.02766	0.1383							0
5	0.3385	10	0.03385	0.3385							0
6	0.9698	25	0.03879	0.9698							0
7	2.1433	50	0.04287	2.1433							0

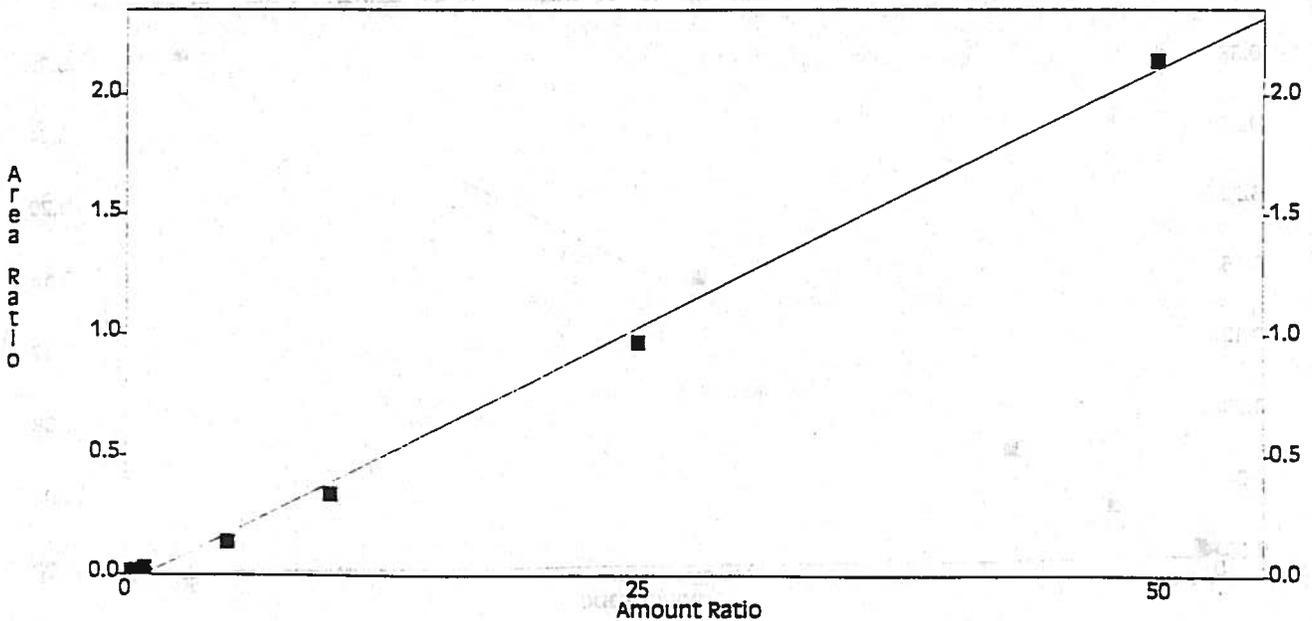
Calib Flag: Replace

Average RF: 0.0338013
RF StdDev: 0.00534885
RF %RSD: 15.8244

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 23.2575 x Area + 1.00832
R² = 0.996713 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:06

Channel : A

Peak : Trans 1,3-dcpe

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0031	0.4	0.007655	0.0031							0
2	0.0040	0.5	0.008085	0.0040							0
3	0.0077	1	0.007664	0.0077							0
4	0.0277	5	0.007522	0.0277							0
5	0.0807	10	0.00807	0.0807							0
6	0.1973	25	0.007893	0.1973*							0
7	0.3400	50	0.006801	0.3400							0

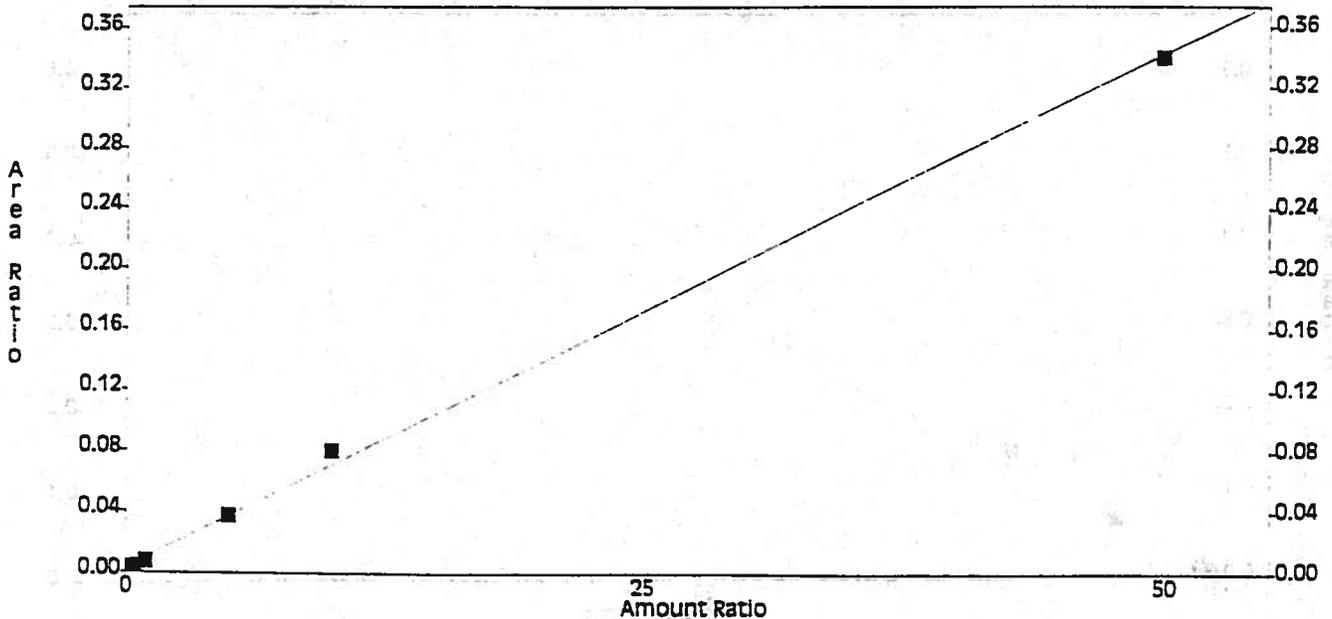
Calib Flag: Replace

Average RF: 0.00763474
 RF StdDev: 0.000468999
 RF %RSD: 6.14295

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 147.488 x Area - 0.481419
 R² = 0.998622 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

Printed : Jun 04, 1996 17:06:07

Channel : A

Peak : Pce

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0056	0.4	0.01411	0.0056							0
2	0.0075	0.5	0.01494	0.0075							0
3	0.0147	1	0.01469	0.0147							0
4	0.0701	5	0.01401	0.0701							0
5	0.1517	10	0.01517	0.1517							0
6	0.3397	25	0.01359	0.3397							0
7	0.6103	50	0.01221	0.6103							0

Calib Flag: Replace

Average RF: 0.014104

RF StdDev: 0.00100587

RF %RSD: 7.13178

RF Definition: Area / Amount

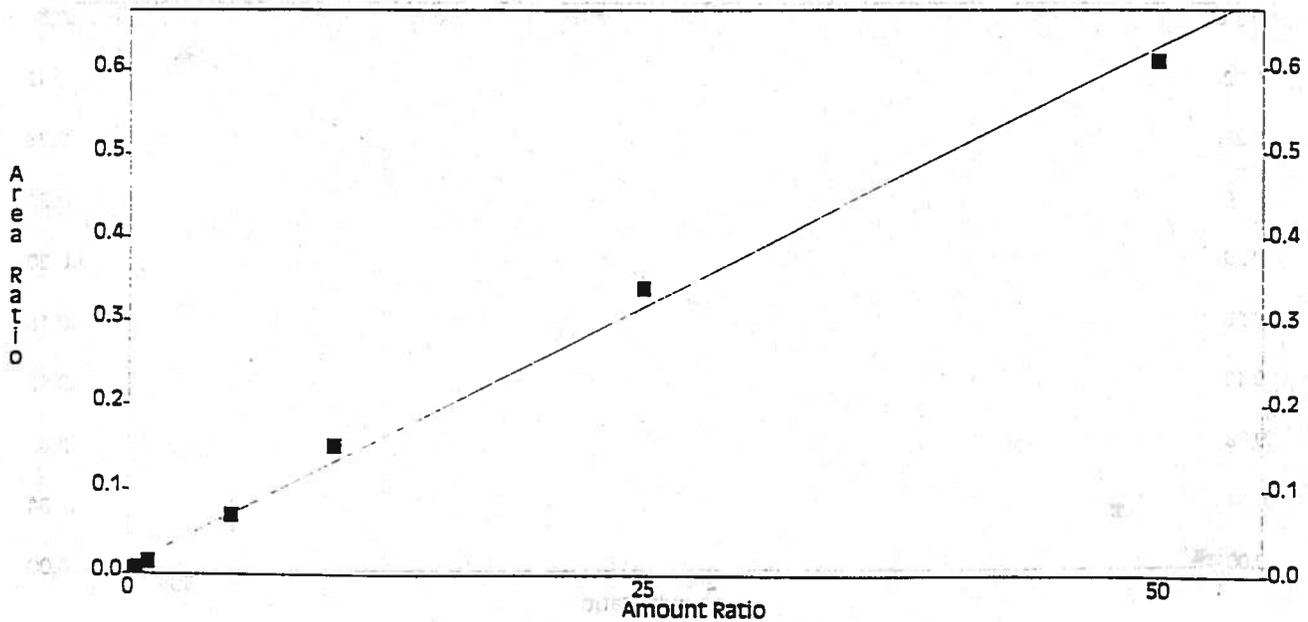
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 80.9858 x Area - 0.750166

R² = 0.999888 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:07

Channel : A

Peak : 1c14fbz (surr)

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0129	4	0.003227	0.0129							0
2	0.0161	5	0.003216	0.0161							0
3	0.0285	10	0.002851	0.0285							0
4	0.1434	50	0.002868	0.1434							0
5	0.3507	100	0.003507	0.3507							0
6	0.9864	250	0.003945	0.9864							0
7	2.1133	500	0.004227	2.1133							0

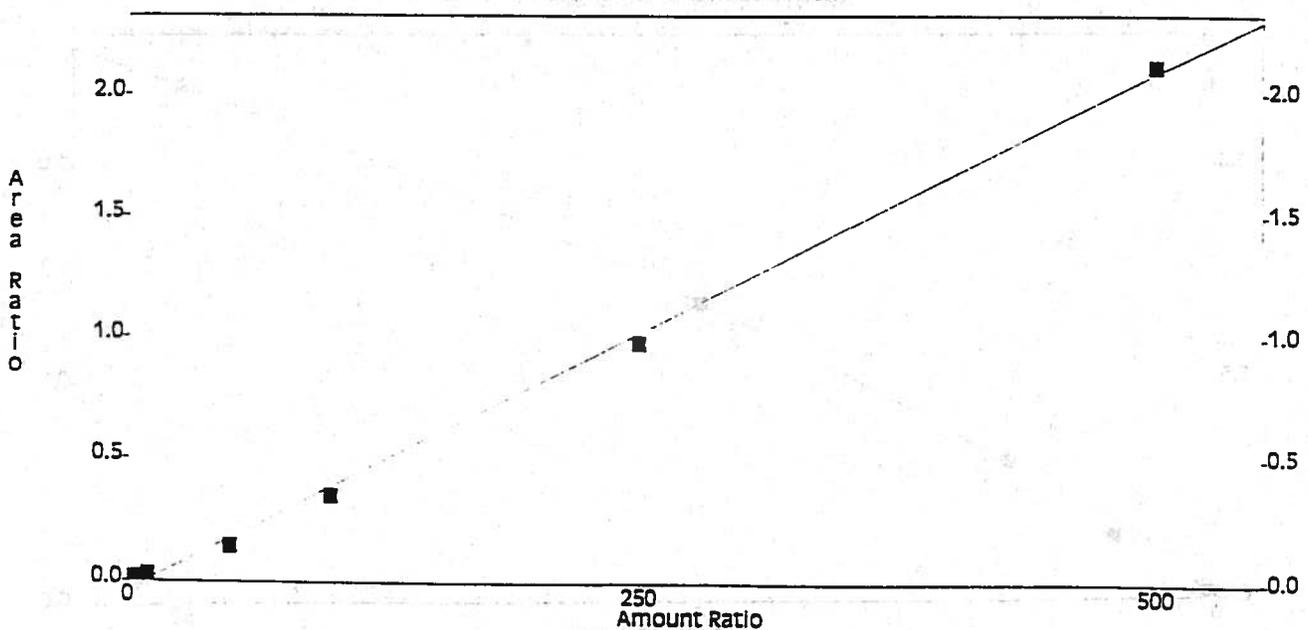
Calib Flag: Replace

Average RF: 0.00340598
 RF StdDev: 0.000522798
 RF %RSD: 15.3494

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 235.526 x Area + 8.43256
 R² = 0.998048

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:07
 Channel : A
 Peak : Chlorobenzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0117	0.4	0.0293	0.0117							0
2	0.0150	0.5	0.03007	0.0150							0
3	0.0288	1	0.02878	0.0288							0
4	0.1460	5	0.0292	0.1460							0
5	0.3179	10	0.03179	0.3179							0
6	0.6804	25	0.02722	0.6804							0
7	1.1868	50	0.02374	1.1868							0

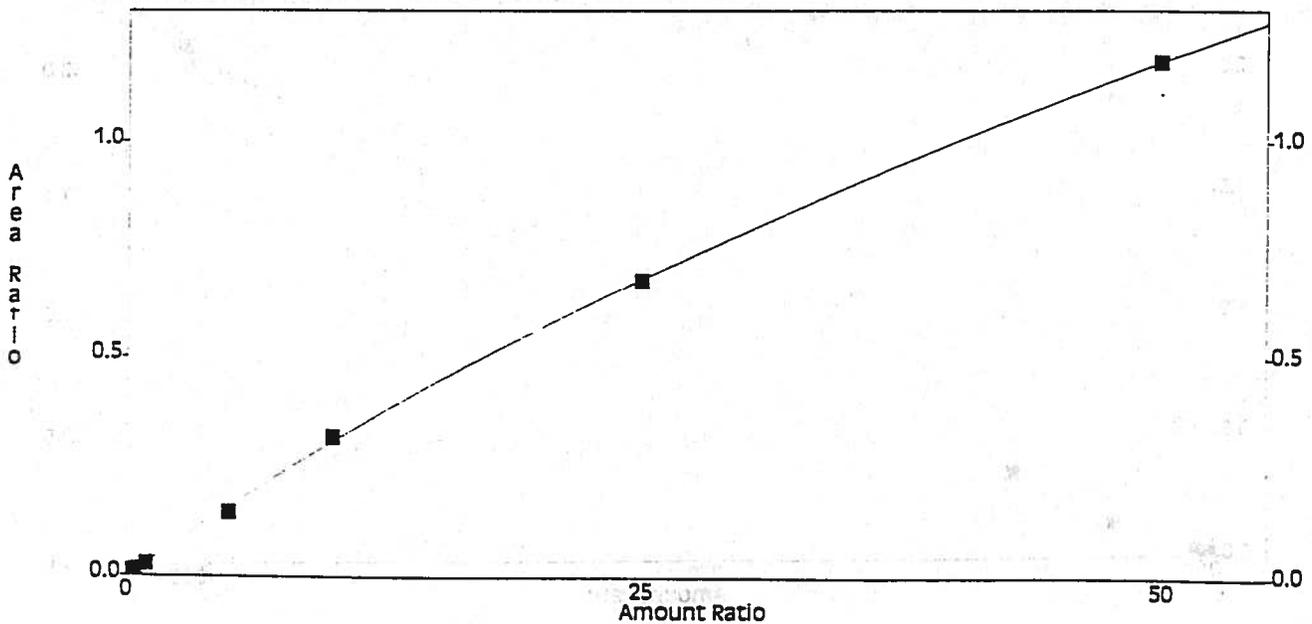
Calib Flag: Replace

Average RF: 0.0285862
 RF %RSD: 8.89506

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = 11.2541 x Area² + 28.671 x Area + 0.145902
 R² = 0.999818 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:07
 Channel : A
 Peak : Ethylbenzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0104	0.4	0.02595	0.0104							0
2	0.0134	0.5	0.02677	0.0134							0
3	0.0261	1	0.02612	0.0261							0
4	0.1315	5	0.0263	0.1315							0
5	0.2521	10	0.02521	0.2521							0
6	0.5035	25	0.02014	0.5035							0
7	0.8533	50	0.01707	0.8533							0

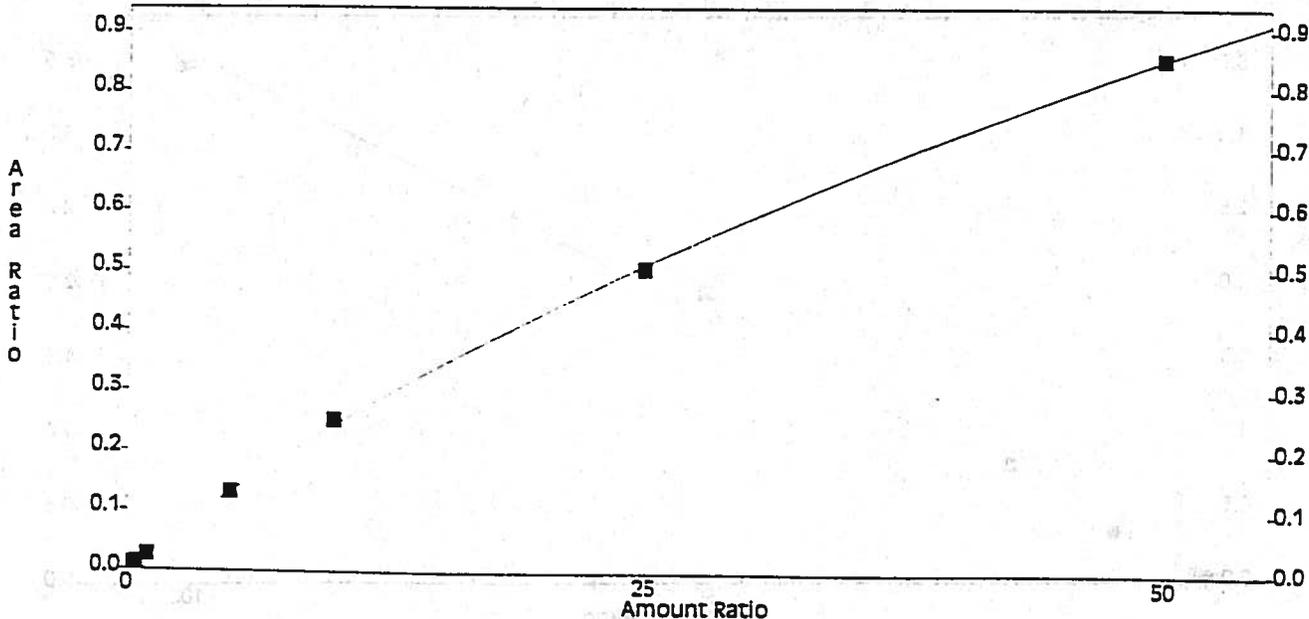
Calib Flag: Replace

Average RF: 0.0239368
 RF StdDev: 0.00377929
 RF %RSD: 15.7886

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = 28.2921 x Area² + 34.5996 x Area - 0.0183487
 R² = 0.999774 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:08
 Channel : A
 Peak : M/P Xylene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic	STD	Replic %RSD	Old Area Ratio
1	0.0230	0.8	0.02874	0.0230								0
2	0.0294	1	0.02942	0.0294								0
3	0.0569	2	0.02844	0.0569								0
4	0.3359	10	0.03359	0.3359								0
5	0.8020	20	0.0401	0.8020								0
6	1.9611	50	0.03922	1.9611								0
7	3.4854	100	0.03485	3.4854								0

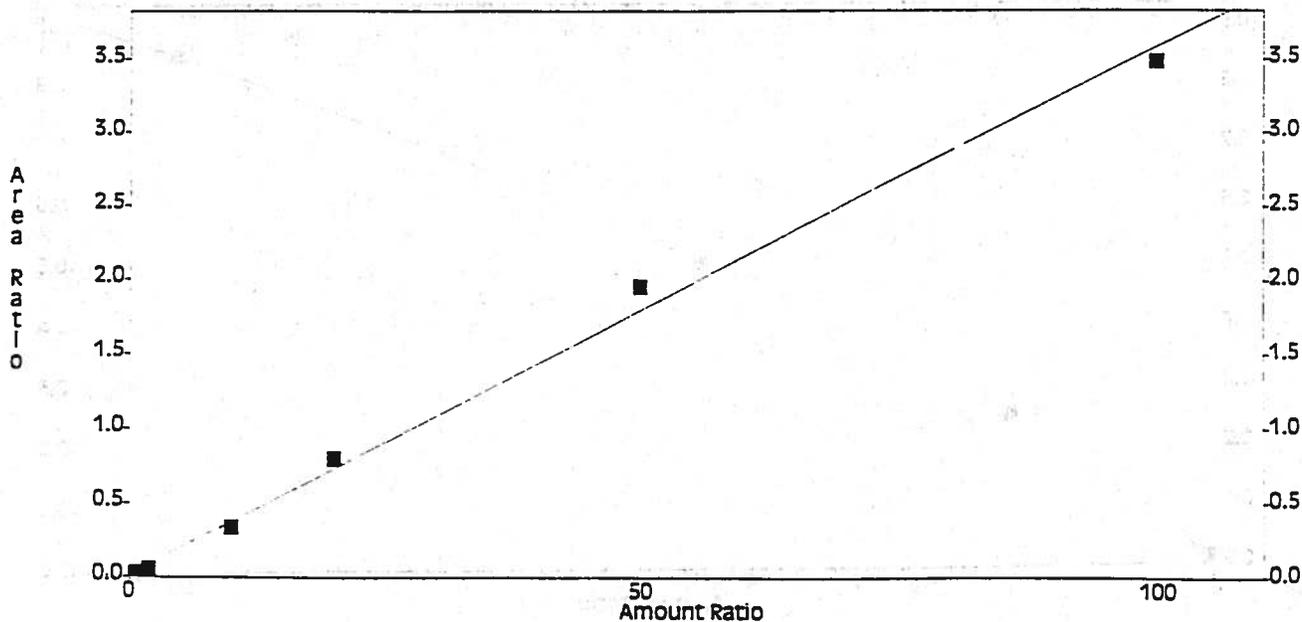
Calib Flag: Replace

Average RF: 0.0334806
 RF StdDev: 0.00488387
 RF %RSD: 14.5872

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 28.0473 x Area - 0.563108
 $R^2 = 0.995768$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:08

Channel : A

Peak : O Xylene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0102	0.4	0.0255	0.0102							0
2	0.0129	0.5	0.02585	0.0129							0
3	0.0244	1	0.02436	0.0244							0
4	0.1173	5	0.02346	0.1173							0
5	0.2875	10	0.02875	0.2875							0
6	0.8169	25	0.03268	0.8169							0
7	1.7829	50	0.03566	1.7829							0

Calib Flag: Replace

Average RF: 0.0280347

RF StdDev: 0.00457982

RF %RSD: 16.3363

RF Definition: Area / Amount

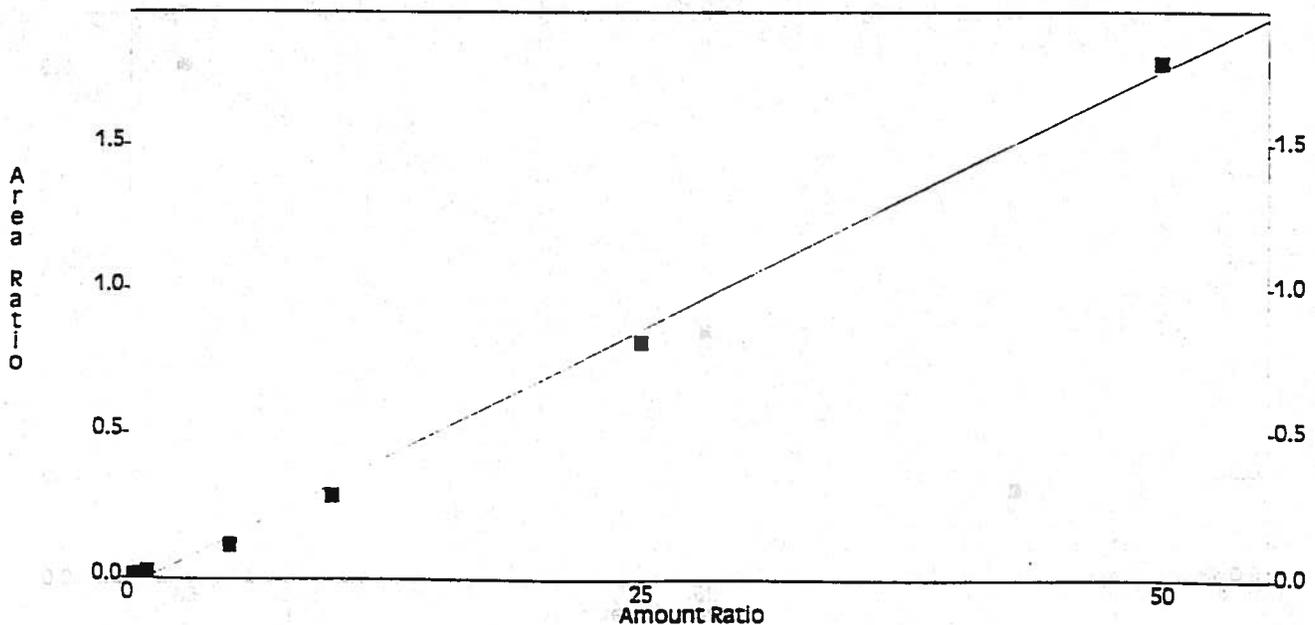
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 27.9397 x Area + 0.946707

R² = 0.997325 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:09

Channel : A

Peak : Styrene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0145	0.4	0.03635	0.0145							0
2	0.0169	0.5	0.03379	0.0169							0
3	0.0316	1	0.03161	0.0316							0
4	0.1623	5	0.03246	0.1623							0
5	0.4383	10	0.04383	0.4383							0
6	1.2193	25	0.04877	1.2193							0
7	2.5387	50	0.05077	2.5387							0

Calib Flag: Replace

Average RF: 0.0396564

RF StdDev: 0.00802067

RF %RSD: 20.2254

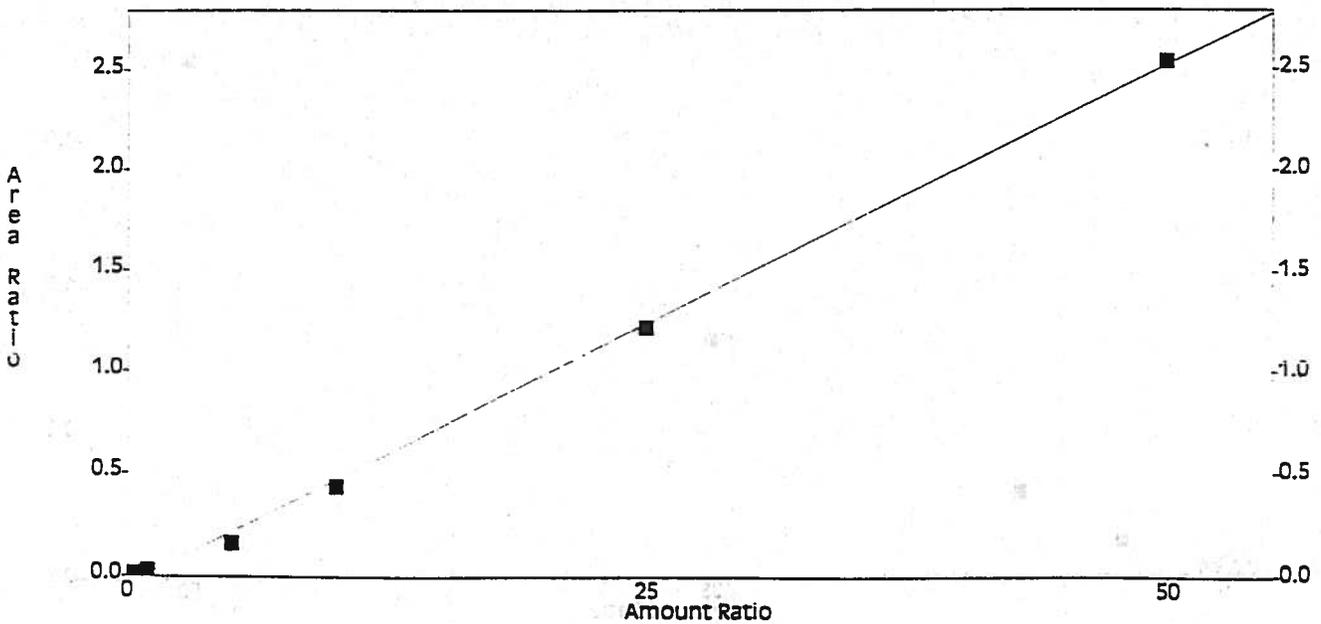
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 19.521 x Area + 0.797614
R² = 0.998629 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:09
 Channel : A
 Peak : Isopropylbenzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0089	0.4	0.02216	0.0089							0
2	0.0113	0.5	0.02253	0.0113							0
3	0.0220	1	0.022	0.0220							0
4	0.1055	5	0.0211	0.1055							0
5	0.2351	10	0.02351	0.2351							0
6	0.5187	25	0.02075	0.5187							0
7	0.9232	50	0.01846	0.9232							0

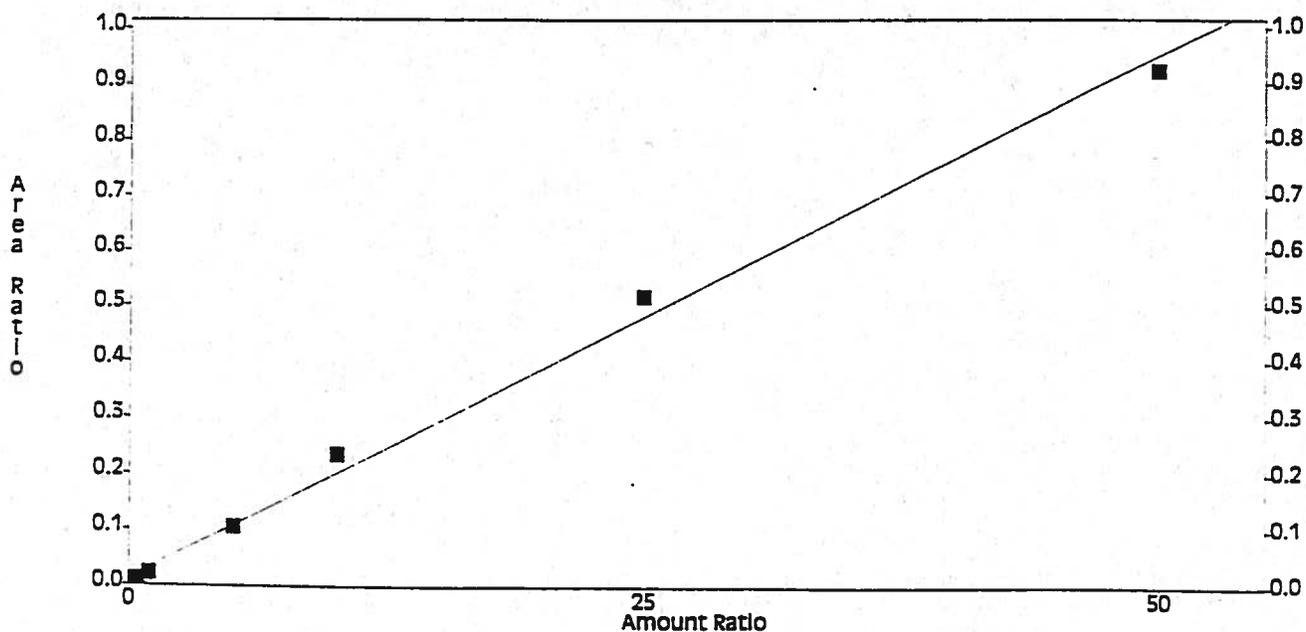
Calib Flag: Replace

Average RF: 0.0215017
 RF StdDev: 0.0016189
 RF %RSD: 7.52916

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 53.4237 x Area - 0.797083
 R² = 0.994927 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:09
 Channel : A
 Peak : n-propylbenzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0098	0.4	0.0246	0.0098							0
2	0.0126	0.5	0.02516	0.0126							0
3	0.0241	1	0.02413	0.0241							0
4	0.1178	5	0.02356	0.1178							0
5	0.2773	10	0.02773	0.2773							0
6	0.7859	25	0.03144	0.7859							0
7	1.5425	50	0.02285	1.5425							0

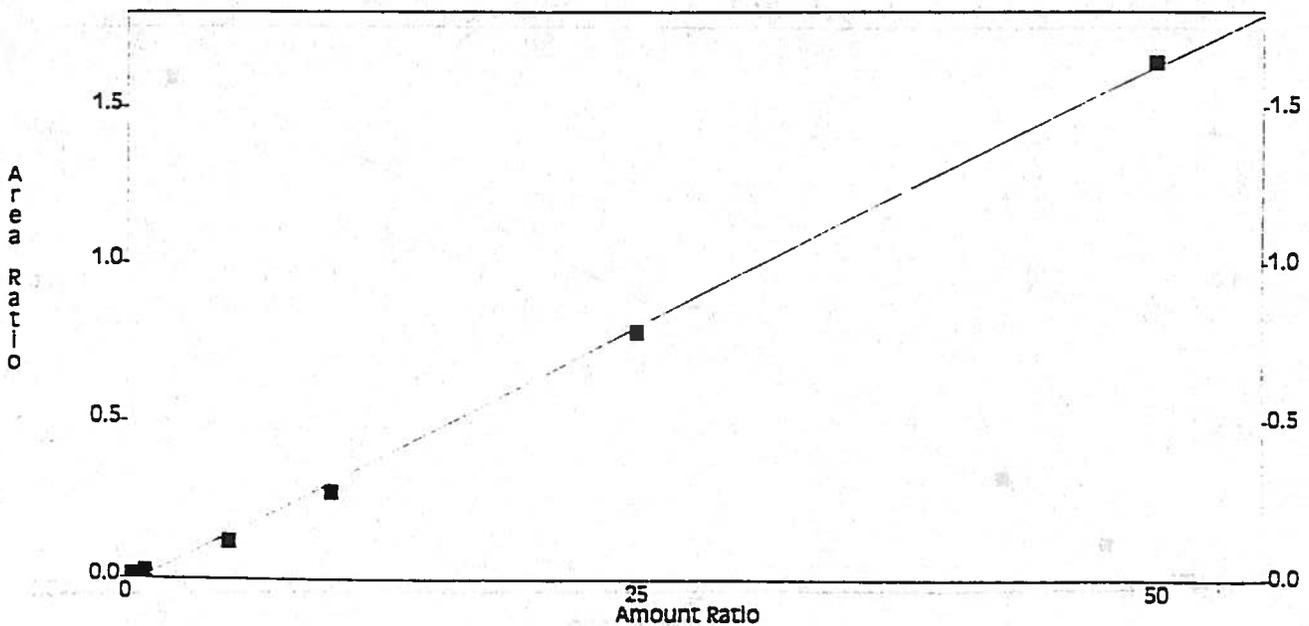
Calib Flag: Replace

Average RF: 0.0270656
 RF StdDev: 0.00373326
 RF %RSD: 13.7934

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 30.2604 x Area + 0.721843
 R² = 0.998692 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:10
 Channel : A
 Peak : Bromobenzene

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0118	0.4	0.02955	0.0118							0
2	0.0151	0.5	0.03011	0.0151							0
3	0.0290	1	0.02897	0.0290							0
4	0.1493	5	0.02986	0.1493							0
5	0.3663	10	0.03663	0.3663							0
6	0.9449	25	0.0378	0.9449							0
7	1.6794	50	0.03359	1.6794							0

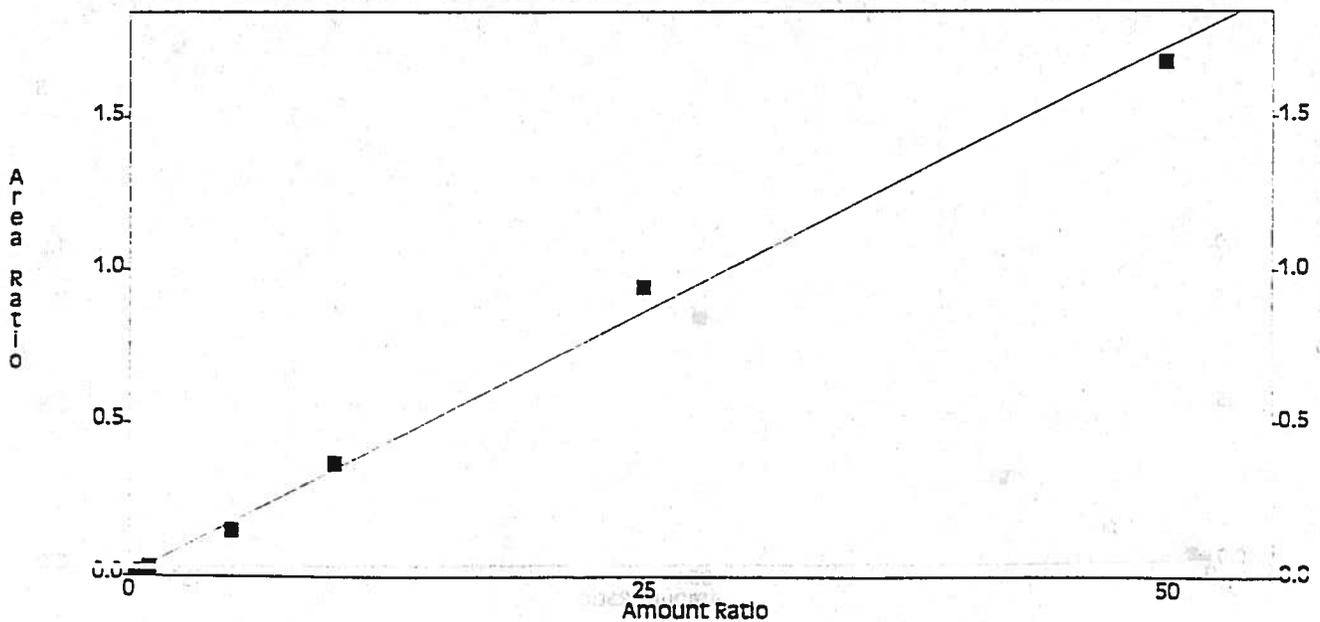
Calib Flag: Replace

Average RF: 0.0323581
 RF StdDev: 0.00365022
 RF %RSD: 11.2807

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 29.0587 x Area - 0.137795
 $R^2 = 0.995974$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:10

Channel : A

Peak : 1,3,5-tmb/2-cl tol

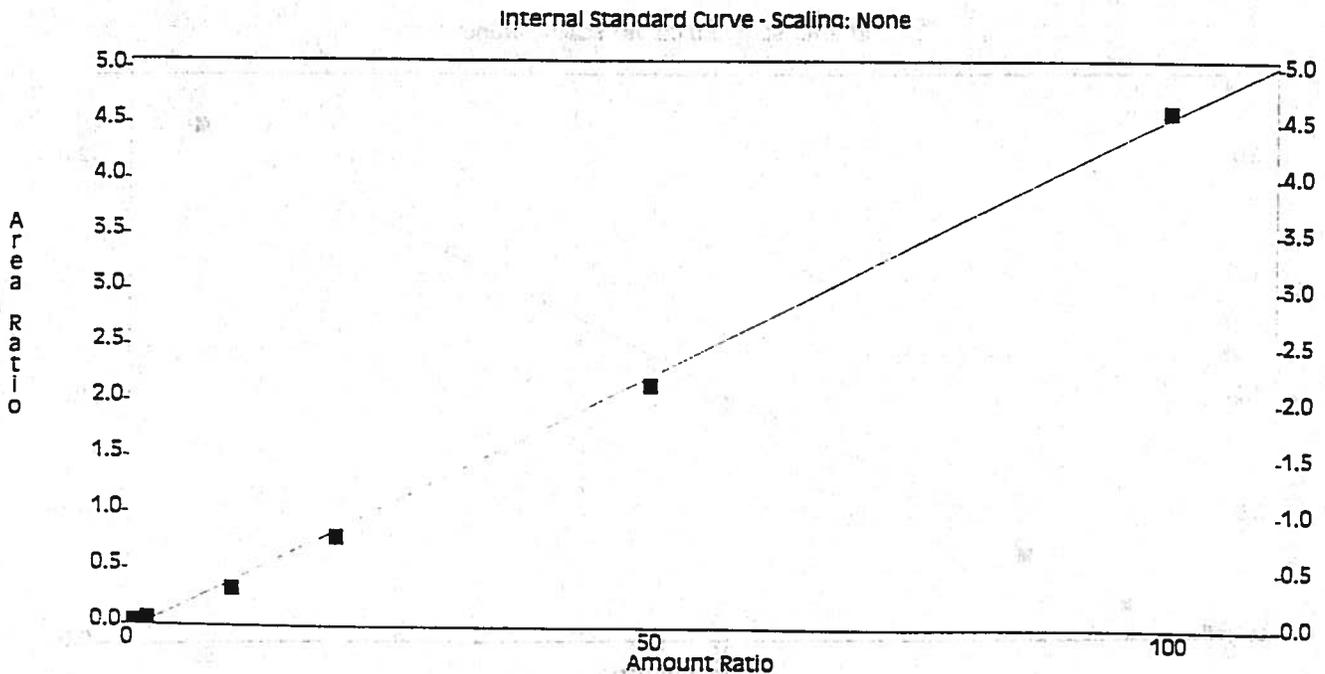
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0244	0.8	0.03055	0.0244							0
2	0.0310	1	0.031	0.0310							0
3	0.0596	2	0.02981	0.0596							0
4	0.3288	10	0.03288	0.3288							0
5	0.7949	20	0.03974	0.7949							0
6	2.1633	50	0.04327	2.1633							0
7	4.6094	100	0.04609	4.6094							0

Calib Flag: Replace

Average RF: 0.0361914
 F StdDev: 0.00672356
 RF %RSD: 18.5778

F Definition: Area / Amount
 Weighting Method: None
 Int Through Zero: No

Linear Fit: Amount = 21.6027 x Area + 1.53293
 R² = 0.998596 ✓



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:10

Channel : A

Peak : 4-cl toluene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0114	0.4	0.02855	0.0114							0
2	0.0149	0.5	0.02977	0.0149							0
3	0.0280	1	0.02798	0.0280							0
4	0.1460	5	0.02919	0.1460							0
5	0.3544	10	0.03544	0.3544							0
6	0.9908	25	0.03963	0.9908							0
7	2.1465	50	0.04293	2.1465							0

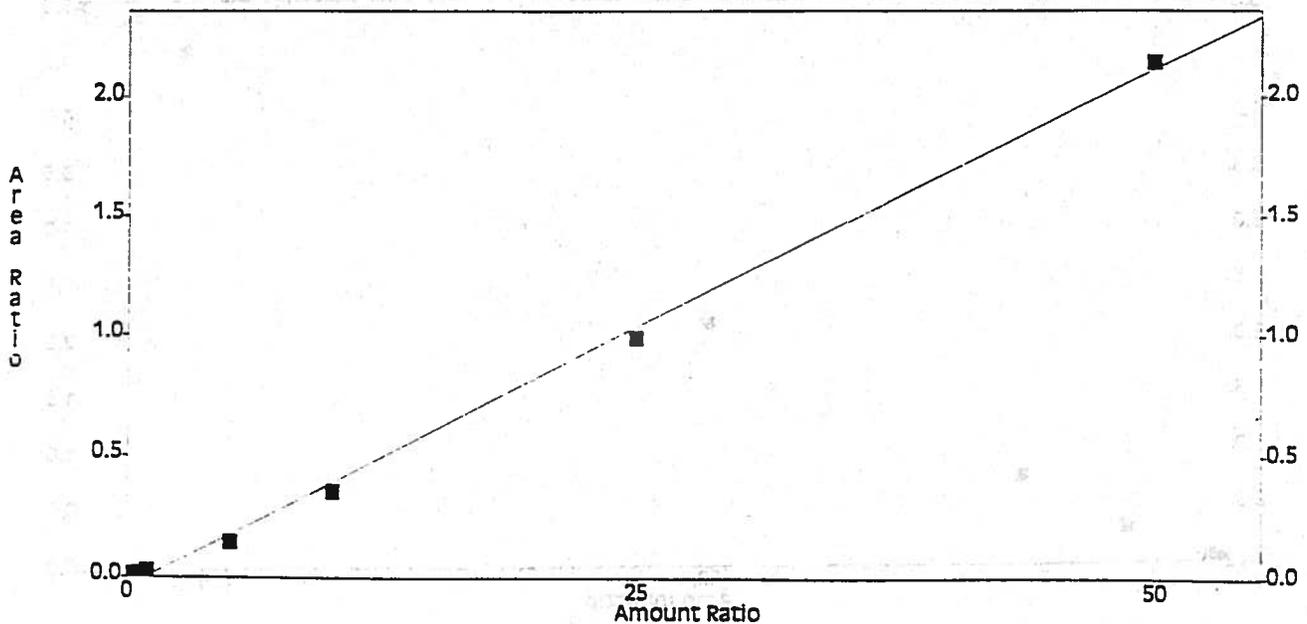
Calib Flag: Replace

Average RF: 0.0333557
RF StdDev: 0.00602207
RF %RSD: 18.0541

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 23.2032 x Area + 0.890891
R² = 0.997823 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:11

Channel : A

Peak : t-butylbenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0083	0.4	0.02082	0.0083							0
2	0.0098	0.5	0.01956	0.0098							0
3	0.0201	1	0.02012	0.0201							0
4	0.0896	5	0.01791	0.0896							0
5	0.2009	10	0.02009	0.2009							0
6	0.5894	25	0.02358	0.5894							0
7	1.3132	50	0.02626	1.3132							0

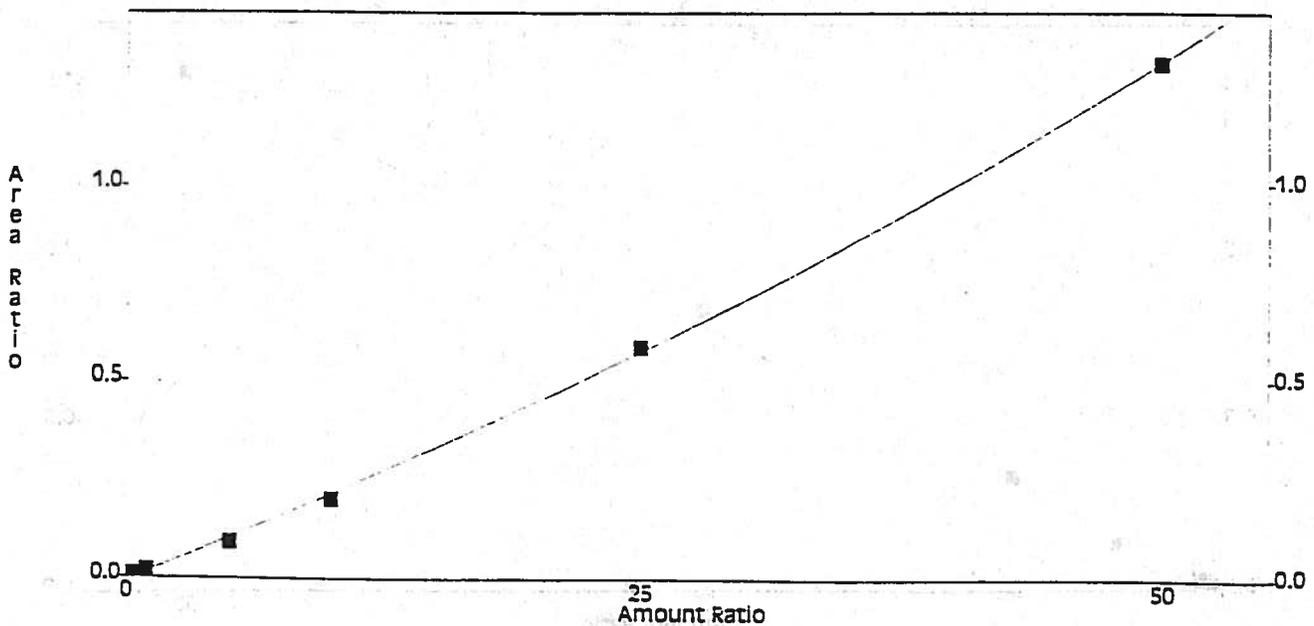
Calib Flag: Replace

Average RF: 0.021192
RF StdDev: 0.00280873
RF %RSD: 13.2537

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Quadratic Fit: Amount = -6.68489 x Area² + 46.5608 x Area + 0.312482
R² = 0.999459 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:11

Channel : A

Peak : 1,2,4-tmb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0113	0.4	0.02825	0.0113							0
2	0.0143	0.5	0.0285	0.0143							0
3	0.0283	1	0.02828	0.0283							0
4	0.1422	5	0.02845	0.1422							0
5	0.3362	10	0.03362	0.3362							0
6	0.8319	25	0.03328	0.8319							0
7	1.5261	50	0.03072	1.5261							0

Calib Flag: Replace

Average RF: 0.0301575

RF StdDev: 0.00240977

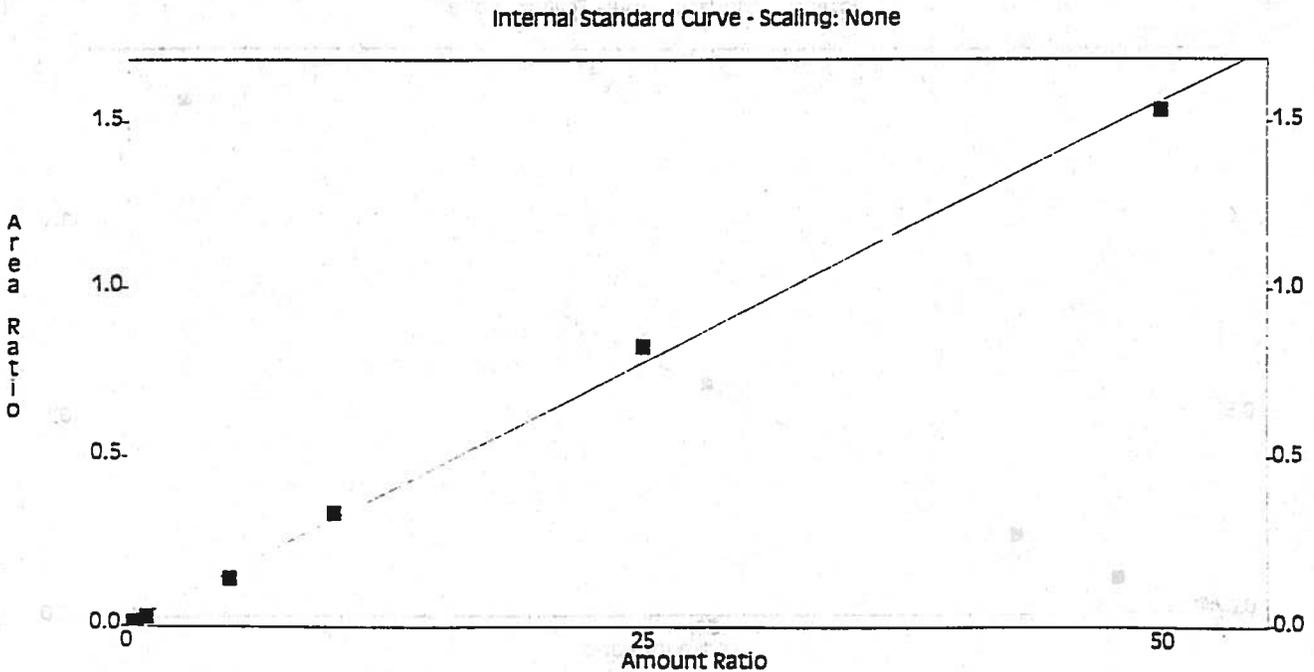
RF %RSD: 7.99061

RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 32.0696 x Area - 0.158632
R² = 0.998044



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:11

Channel : A

Peak : s-butylbenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0090	0.4	0.02249	0.0090							0
2	0.0112	0.5	0.02232	0.0112							0
3	0.0222	1	0.0222	0.0222							0
4	0.1030	5	0.0206	0.1030							0
5	0.2294	10	0.02294	0.2294							0
6	0.6677	25	0.02671	0.6677							0
7	1.4915	50	0.02983	1.4915							0

Calib Flag: Replace

Average RF: 0.02387

RF StdDev: 0.00322012

RF %RSD: 13.4903

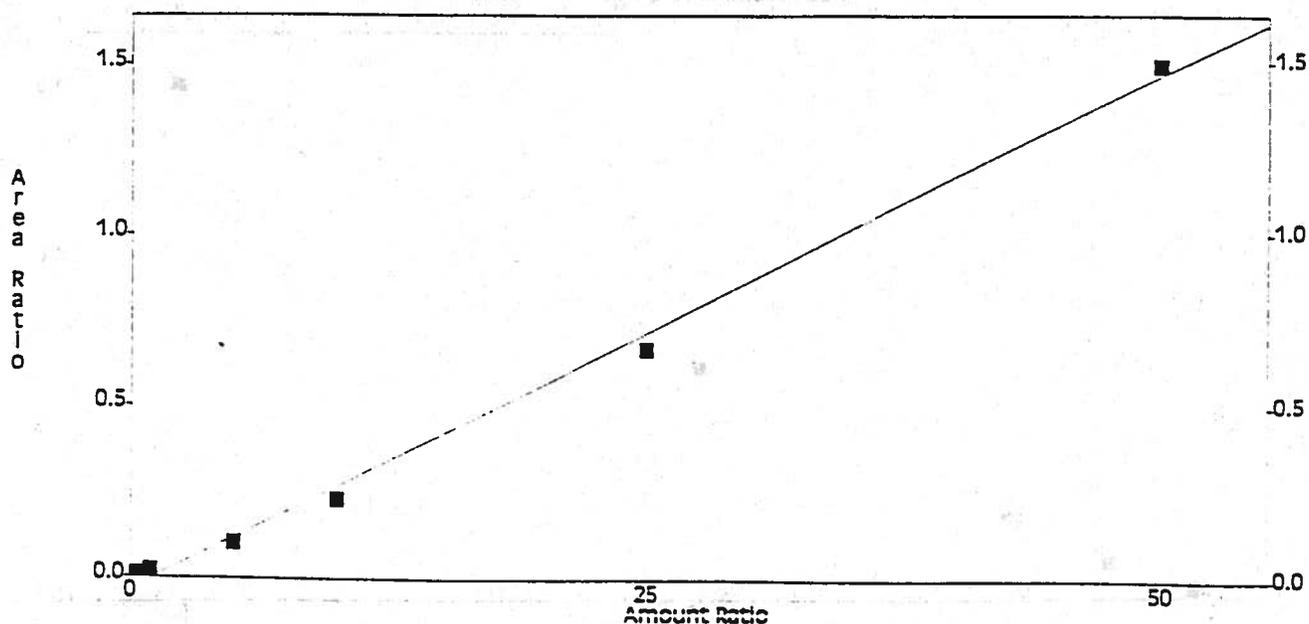
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 33.4837 x Area + 1.00769
R² = 0.996209

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:12
 Channel : A
 Peak : p-isopropyltoluene

* - Replicate Not Used

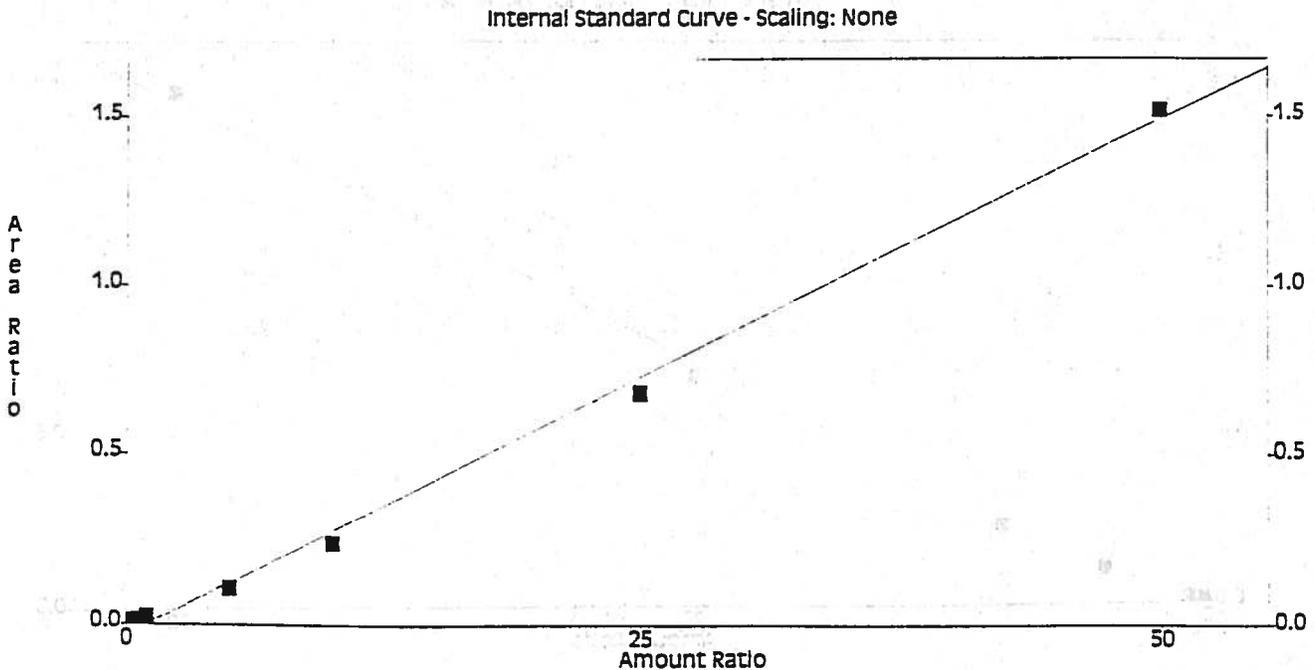
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0098	0.4	0.02451	0.0098							0
2	0.0118	0.5	0.02361	0.0118							0
3	0.0227	1	0.02265	0.0227							0
4	0.1058	5	0.02117	0.1058							0
5	0.2373	10	0.02373	0.2373							0
6	0.6845	25	0.02738	0.6845							0
7	1.5181	50	0.03036	1.5181							0

Calib Flag: Replace

Average RF: 0.024774
 RF StdDev: 0.00311044
 RF %RSD: 12.5553

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 32.8958 x Area + 0.956803
 $R^2 = 0.996597$ ✓



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:12
 Channel : A
 Peak : 1,3-dcb

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0098	0.4	0.02456	0.0098							0
2	0.0128	0.5	0.02565	0.0128							0
3	0.0248	1	0.02482	0.0248							0
4	0.1270	5	0.02539	0.1270							0
5	0.2871	10	0.02871	0.2871							0
6	0.5792	25	0.02317	0.5792							0
7	0.9341	50	0.01868	0.9341							0

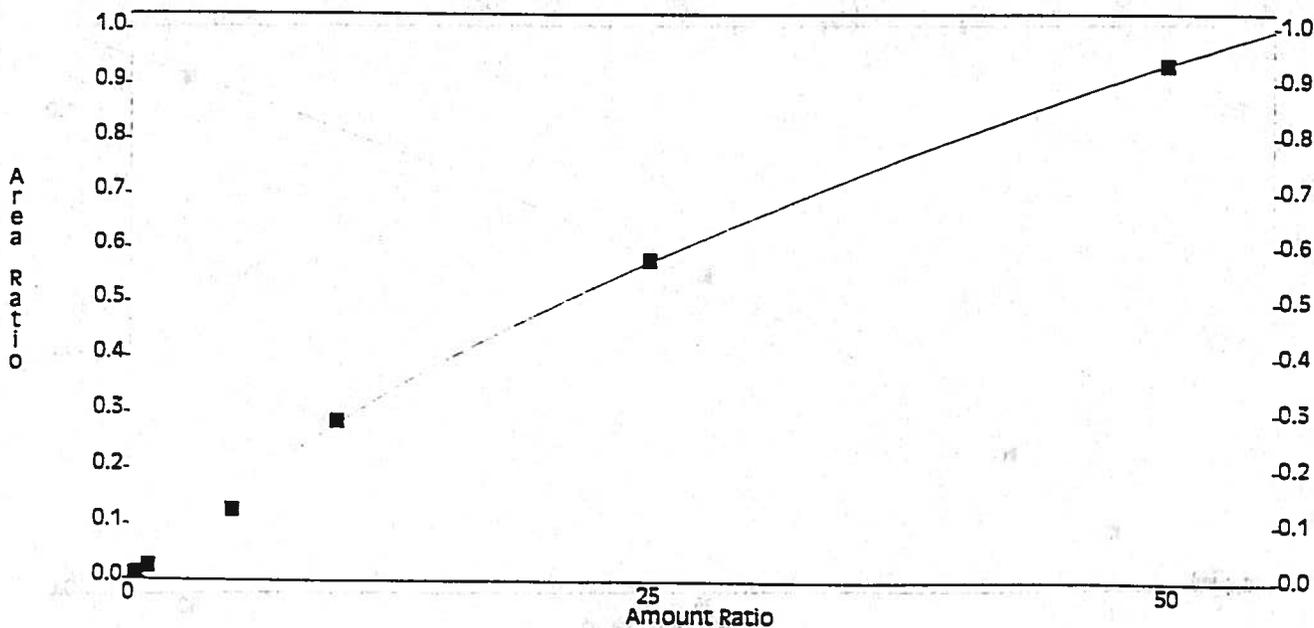
Calib Flag: Replace

Average RF: 0.0244259
 F StdDev: 0.00304315
 RF %RSD: 12.4587

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = 28.8709 x Area² + 26.0789 x Area + 0.379097
 R² = 0.999553 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:12

Channel : A

Peak : 1,4-dcb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0108	0.4	0.02706	0.0108							0
2	0.0133	0.5	0.02658	0.0133							0
3	0.0244	1	0.02437	0.0244							0
4	0.1231	5	0.02462	0.1231							0
5	0.2892	10	0.02892	0.2892							0
6	0.6633	25	0.02653	0.6633							0
7	1.0812	50	0.02162	1.0812							0

Calib Flag: Replace

Average RF: 0.0256733

RF StdDev: 0.00235395

RF %RSD: 9.16887

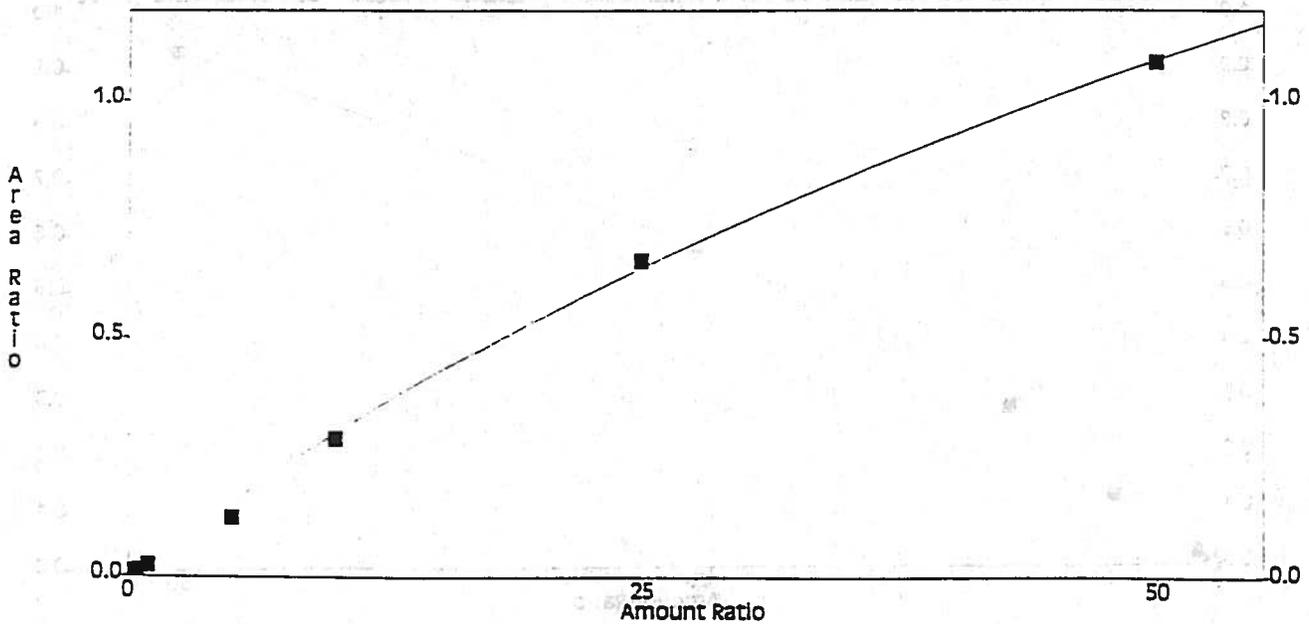
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Quadratic Fit: Amount = $18.034 \times \text{Area}^2 + 26.0533 \times \text{Area} + 0.5185$
 $R^2 = 0.998967$

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:13

Channel : A

Peak : n-butylbenzene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0099	0.4	0.02487	0.0099							0
2	0.0121	0.5	0.02428	0.0121							0
3	0.0243	1	0.02432	0.0243							0
4	0.1147	5	0.02295	0.1147							0
5	0.2559	10	0.02559	0.2559							0
6	0.7332	25	0.02933	0.7332							0
7	1.6088	50	0.03218	1.6088							0

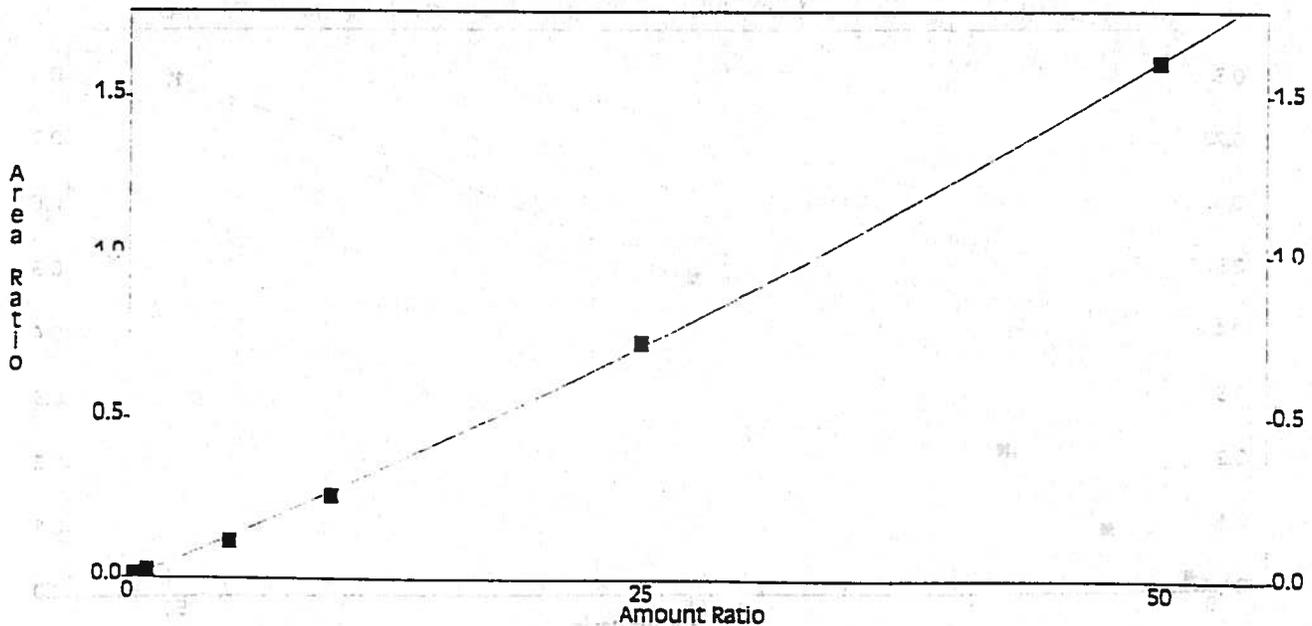
Calib Flag: Replace

Average RF: 0.0262156
RF StdDev: 0.00330257
RF %RSD: 12.5977

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Quadratic Fit: Amount = $-3.82773/x \text{ Area}^2 + 37.0171 x \text{ Area} + 0.291024$
 $R^2 = 0.999607$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:13
 Channel : A
 Peak : 1,2-dcb

* - Replicate Not Used

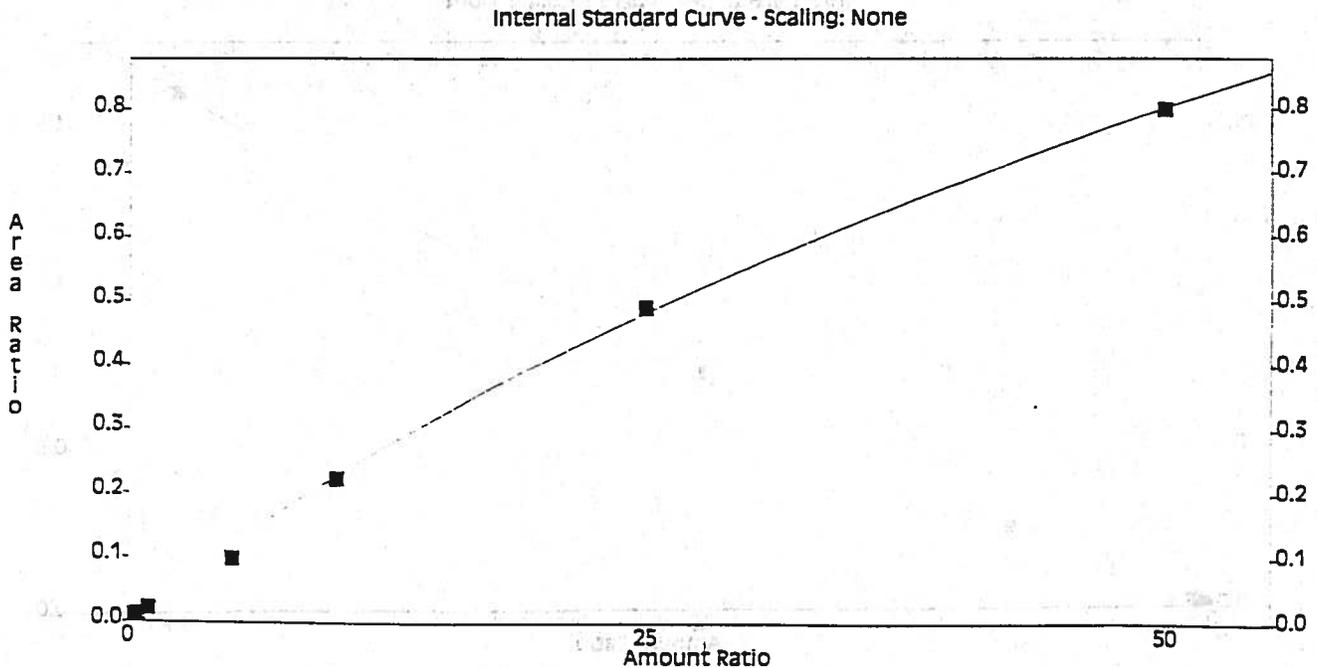
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0100	0.4	0.02512	0.0100							0
2	0.0121	0.5	0.02413	0.0121							0
3	0.0216	1	0.02163	0.0216							0
4	0.0989	5	0.01978	0.0989							0
5	0.2239	10	0.02239	0.2239							0
6	0.4913	25	0.01965	0.4913							0
7	0.7996	50	0.01599	0.7996							0

Calib Flag: Replace

Average RF: 0.021242
 RF StdDev: 0.00308483
 RF %RSD: 14.5223

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = 34.4206 x Area² + 34.3231 x Area + 0.372506
 R² = 0.999324 ✓



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:13

Channel : A

Peak : 1,2,4-tcb

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0053	0.4	0.01318	0.0053							0
2	0.0071	0.5	0.01417	0.0071							0
3	0.0149	1	0.01492	0.0149							0
4	0.0749	5	0.01498	0.0749							0
5	0.1506	10	0.01506	0.1506							0
6	0.3179	25	0.01272	0.3179							0
7	0.5317	50	0.01063	0.5317							0

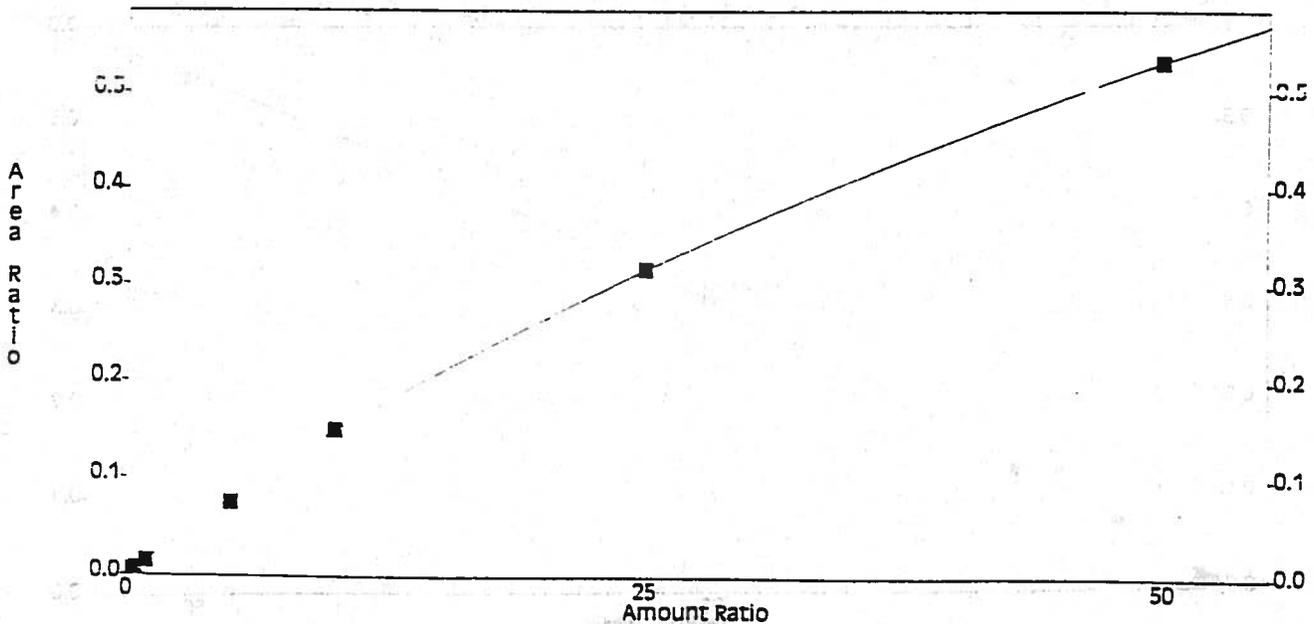
Calib Flag: Replace

Average RF: 0.0136665
RF StdDev: 0.00162497
RF %RSD: 11.8901

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Quadratic Fit: Amount = $72.4587 \times \text{Area}^2 + 55.1564 \times \text{Area} + 0.173548$
 $R^2 = 0.999946$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:14
 Channel : A
 Peak : Hexachlorobutadiene

* - Replicate Not Used

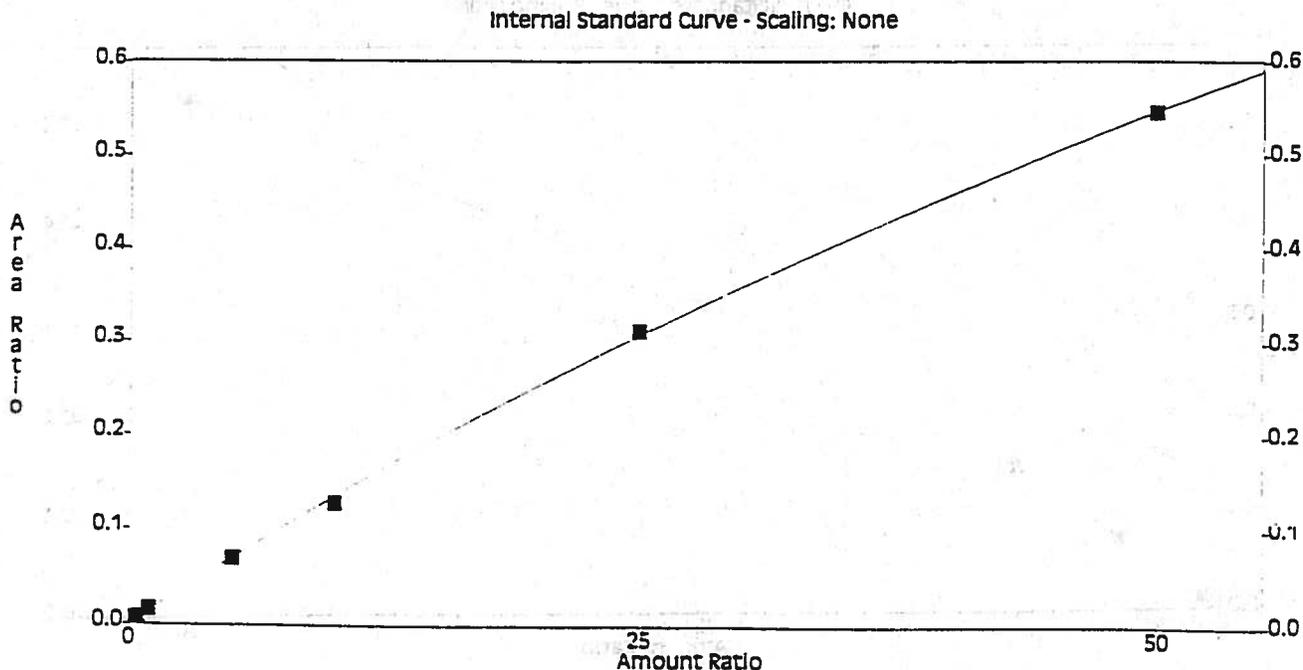
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0061	0.4	0.01537	0.0061							0
2	0.0078	0.5	0.01554	0.0078							0
3	0.0163	1	0.01635	0.0163							0
4	0.0700	5	0.014	0.0700							0
5	0.1284	10	0.01284	0.1284							0
6	0.3134	25	0.01254	0.3134							0
7	0.5472	50	0.01094	0.5472							0

Calib Flag: Replace

Average RF: 0.0139397
 RF StdDev: 0.00193953
 RF %RSD: 13.9138

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = 43.4186 x Area² + 67.3368 x Area + 0.0491041
 R² = 0.999721 ✓



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:14

Channel : A

Peak : Naphthalene

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0053	0.4	0.01331	0.0053							0
2	0.0076	0.5	0.01518	0.0076							0
3	0.0143	1	0.0143	0.0143							0
4	0.0711	5	0.01422	0.0711							0
5	0.1670	10	0.0167	0.1670							0
6	0.4944	25	0.01978	0.4944							0
7	0.9270	50	0.01854	0.9270							0

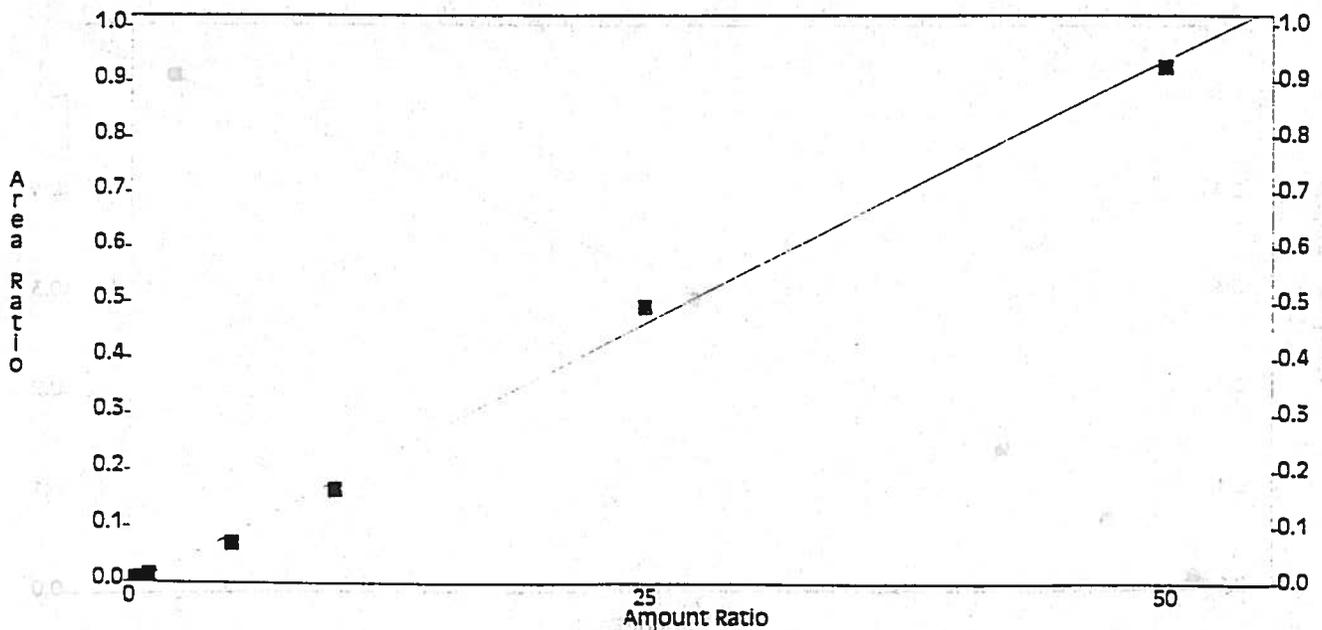
Calib Flag: Replace

Average RF: 0.0160049
RF StdDev: 0.00242028
RF %RSD: 15.1222

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 52.8515 x Area + 0.393432
R² = 0.997937 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:14

Channel : A

Peak : 1,2,3-tcb

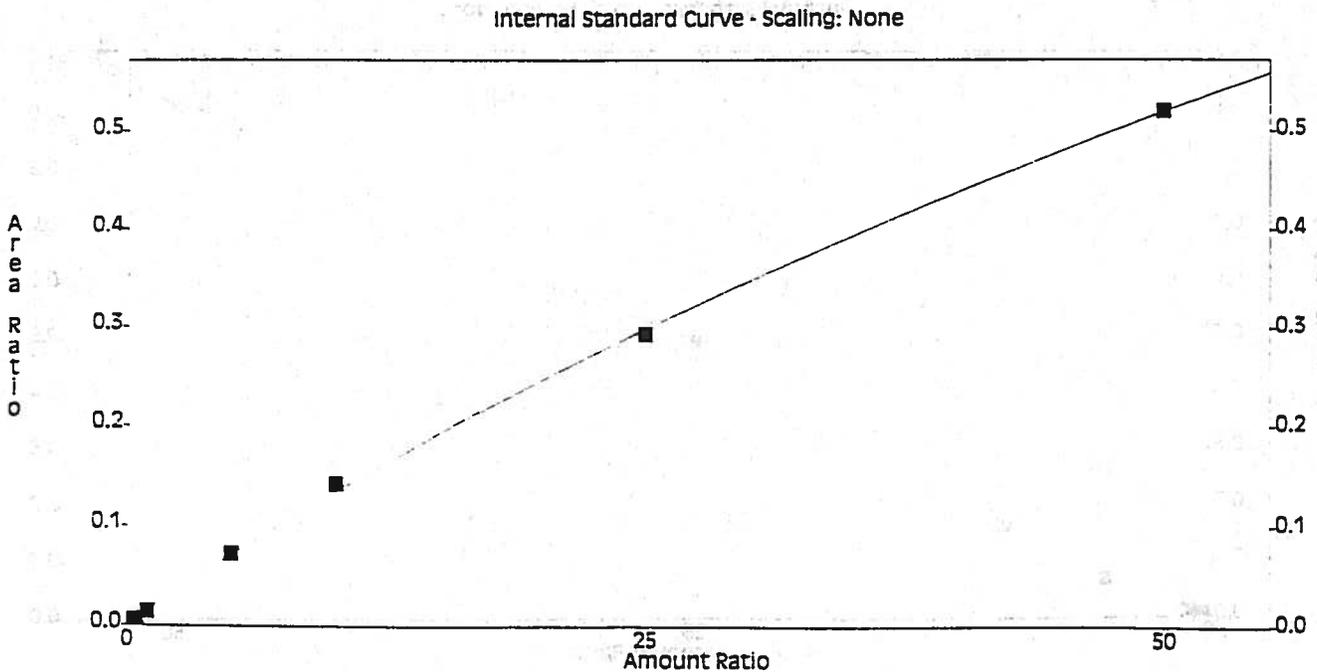
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0053	0.4	0.01318	0.0053							0
2	0.0064	0.5	0.01288	0.0064							0
3	0.0146	1	0.01457	0.0146							0
4	0.0730	5	0.0146	0.0730							0
5	0.1427	10	0.01427	0.1427							0
6	0.2939	25	0.01175	0.2939							0
7	0.5209	50	0.01042	0.5209							0

Calib Flag: Replace

Average RF: 0.0130968
RF StdDev: 0.00157306
RF %RSD: 12.011

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Quadratic Fit: Amount = 56.8231 x Area² + 66.7531 x Area - 0.0629222
R² = 0.999638



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:58

Channel : B

Peak : DCDFM

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0041	0.4	0.01036	0.0041							0
2	0.0036	0.5	0.007212	0.0036*							0
3	0.0141	1	0.0141	0.0141							0
4	0.1622	5	0.03223	0.1622							0
5	0.4006	10	0.04006	0.4006							0
6	0.9770	25	0.03908	0.9770							0
7	1.8841	50	0.03768	1.8841							0

Calib Flag: Replace

Average RF: 0.0289184

RF StdDev: 0.0132594

RF %RSD: 45.8511

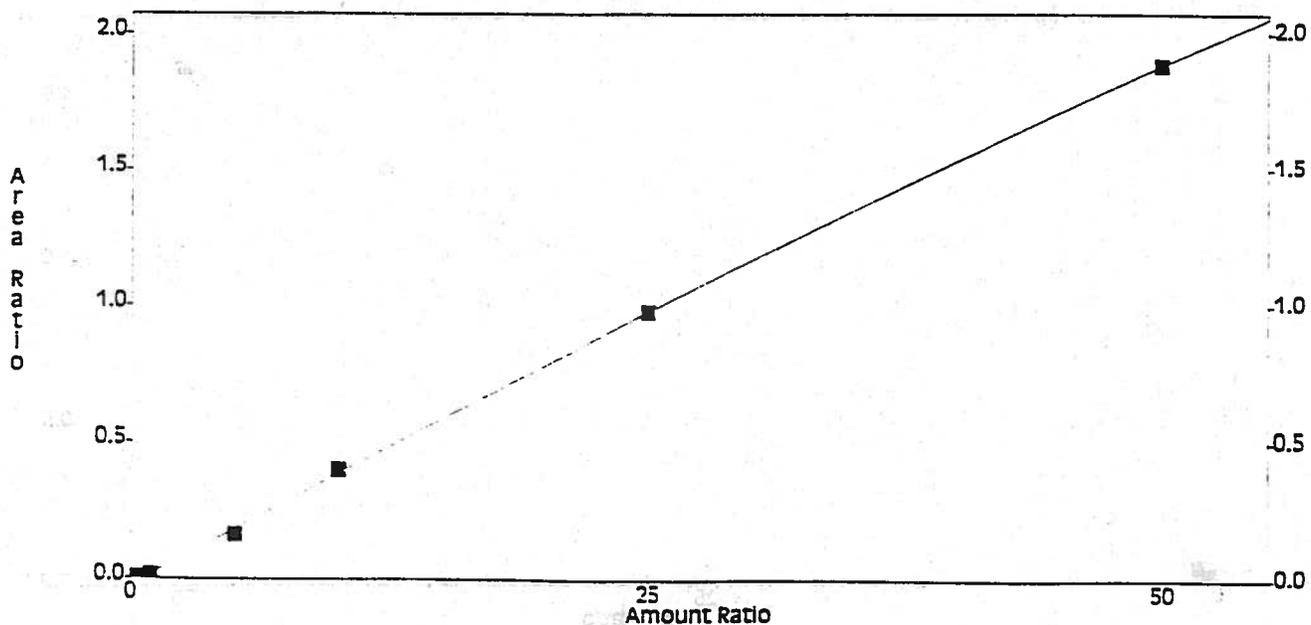
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Quadratic Fit: Amount = 1.41107 x Area² + 23.5457 x Area + 0.626557
R² = 0.999741

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:59

Channel : B

Peak : CHLOROMETHANE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0122	0.4	0.03056	0.0122							0
2	0.0144	0.5	0.02871	0.0144							0
3	0.0402	1	0.04018	0.0402							0
4	0.2275	5	0.2415	0.2275							0
5	0.4258	10	0.04258	0.4258*							0
6	0.9485	25	0.03794	0.9485*							0
7	1.5967	50	0.03193	1.5967							0

Calib Flag: Replace

Average RF: 0.0345745

RF StdDev: 0.00584876

RF %RSD: 16.9164

RF Definition: Area / Amount

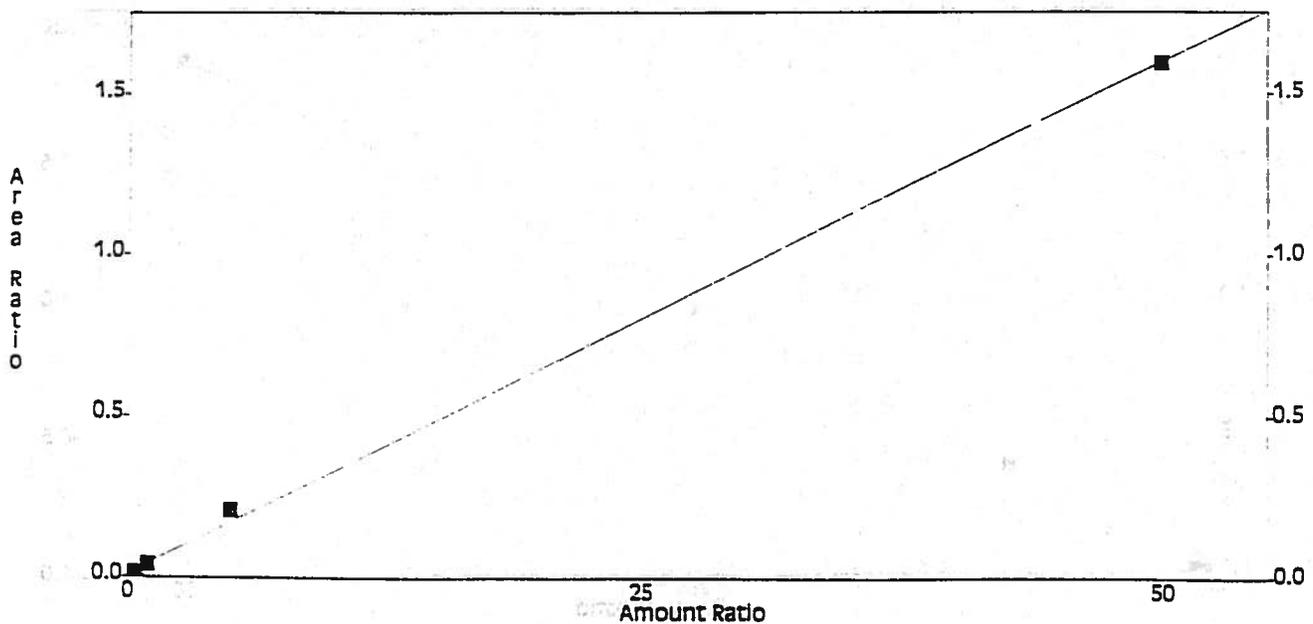
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 31.4789 x Area - 0.399005

R² = 0.9991 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:59
 Channel : B
 Peak : VINYL CHLORIDE

* - Replicate Not Used

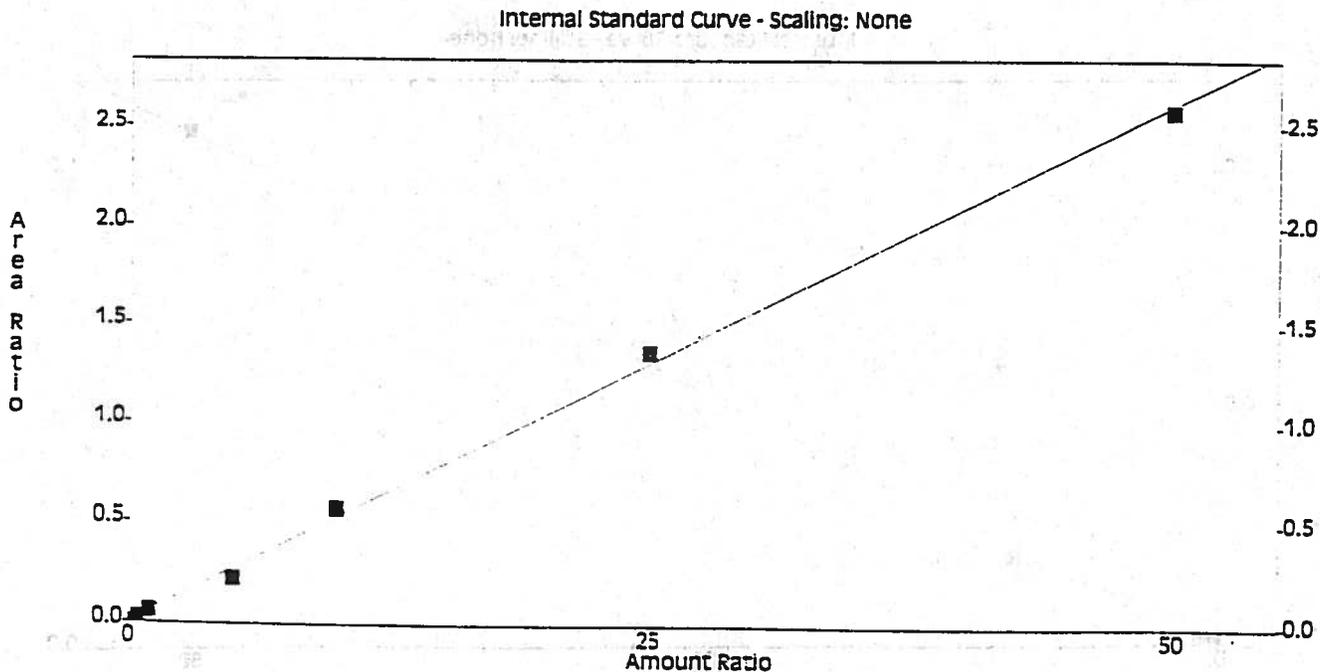
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0277	0.4	0.06919	0.0277*							0
2	0.0258	0.5	0.0517	0.0258							0
3	0.0601	1	0.06008	0.0601							0
4	0.2207	5	0.04414	0.2207							0
5	0.5699	10	0.05699	0.5699							0
6	1.3621	25	0.05448	1.3621							0
7	2.5771	50	0.05154	2.5771							0

Calib Flag: Replace

Average RF: 0.0531557
 RF StdDev: 0.00548726
 RF %RSD: 10.323

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 19.2331 x Area - 0.186774
 $r^2 = 0.998415$



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:06:59
 Channel : B
 Peak : BROMOMETHANE

* - Replicate Not Used

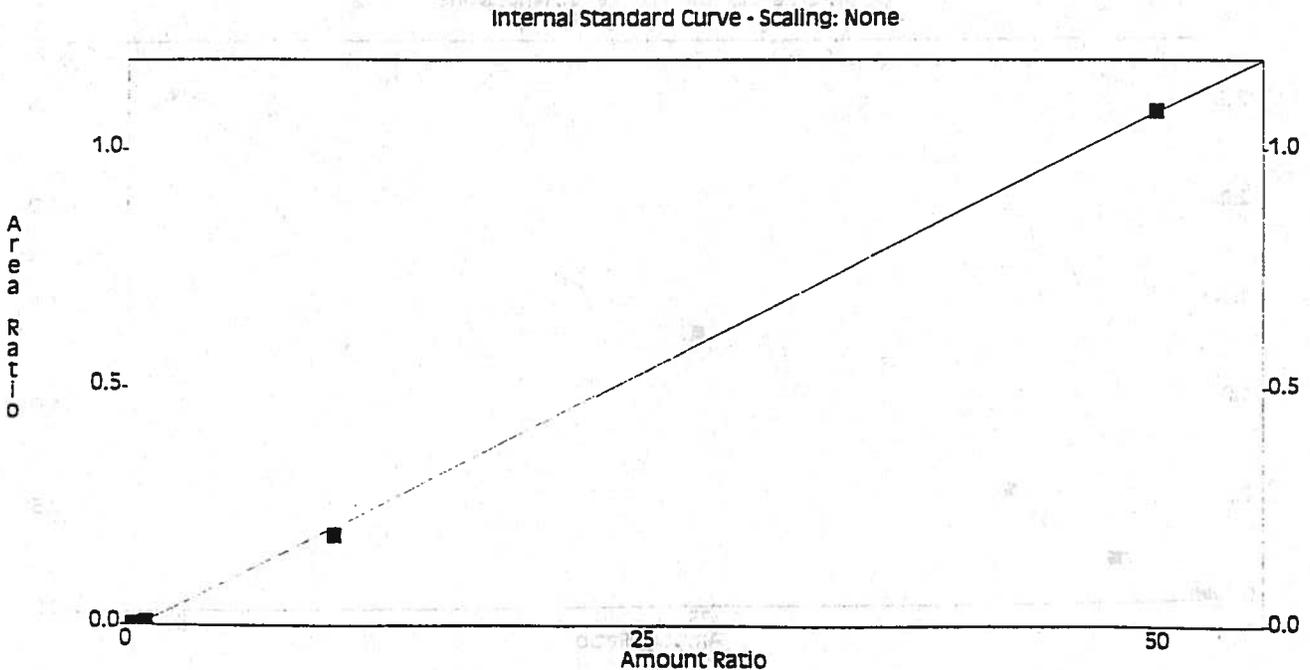
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0018	0.4	0.004443	0.0018							0
2	0.0029	0.5	0.005826	0.0029							0
3	0.0073	1	0.007296	0.0073							0
4	0.0604	5	0.01208	0.0604*							0
5	0.1877	10	0.01877	0.1877							0
6	0.4842	25	0.01937	0.4842*							0
7	1.0828	50	0.02166	1.0828							0

Calib Flag: Replace

Average RF: 0.0115983
 RF StdDev: 0.00799396
 RF %RSD: 68.9233

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 45.6848 x Area + 0.66168
 R² = 0.999561



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:06:59

Channel : B

Peak : CHLOROETHANE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0126	0.4	0.03138	0.0126							0
2	0.0182	0.5	0.03631	0.0182							0
3	0.0415	1	0.04148	0.0415							0
4	0.2451	5	0.04901	0.2451							0
5	0.6345	10	0.06345	0.6345							0
6	1.4416	25	0.05766	1.4416							0
7	2.8801	50	0.0576	2.8801							0

Calib Flag: Replace

Average RF: 0.0481296

RF STDDev: 0.0121124

RF %RSD: 25.1663

RF Definition: Area / Amount

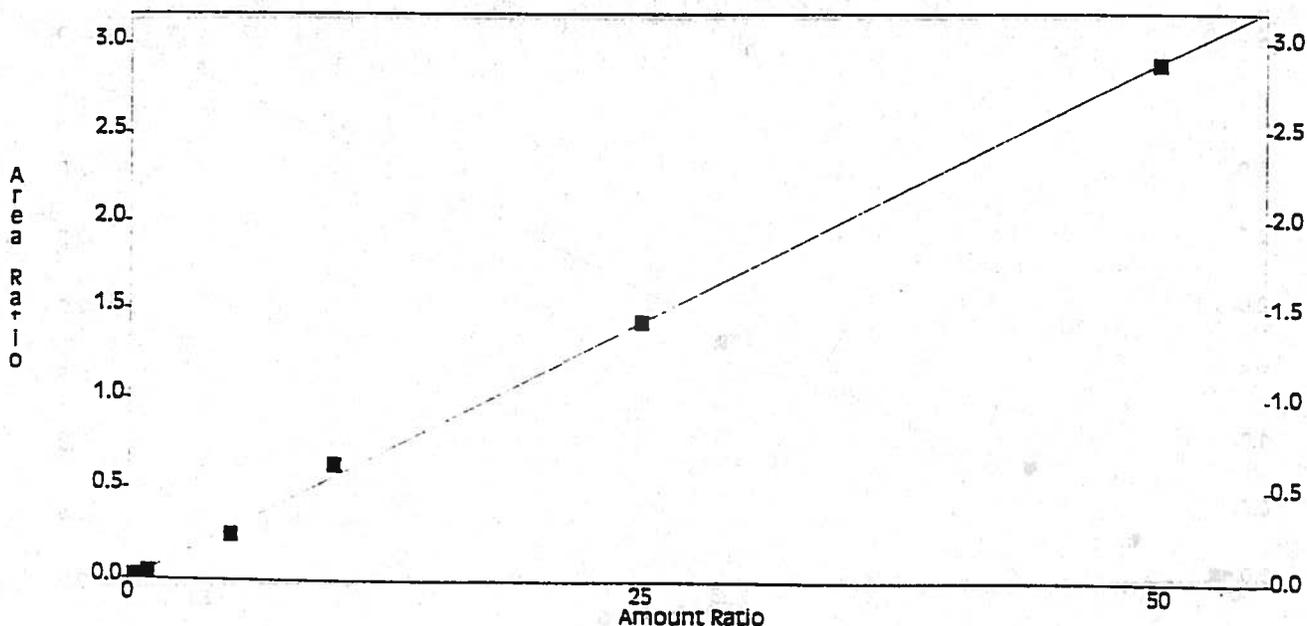
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 17.2515 x Area + 0.132082

R² = 0.999202 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:00

Channel : B

Peak : TCFM

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0144	0.4	0.03611	0.0144							0
2	0.0226	0.5	0.04514	0.0226							0
3	0.0516	1	0.05161	0.0516							0
4	0.2990	5	0.05981	0.2990							0
5	0.8435	10	0.08435	0.8435							0
6	1.7721	25	0.07088	1.7721							0
7	3.7766	50	0.07553	3.7766							0

Calib Flag: Replace

Average RF: 0.0604893

RF StdDev: 0.0173827

RF %RSD: 28.7368

RF Definition: Area / Amount

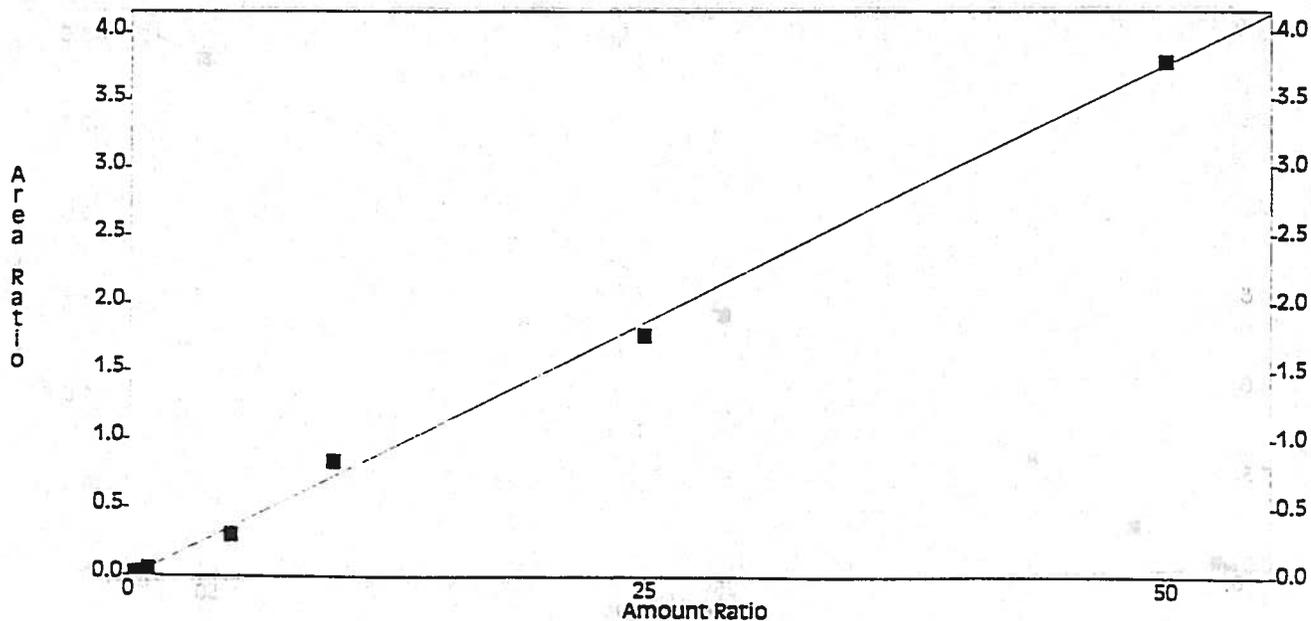
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 13.2399 x Area + 0.305101

R² = 0.997877 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:00

Channel : B

Peak : FREON 113

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0109	0.4	0.02733	0.0109							0
2	0.0141	0.5	0.02827	0.0141							0
3	0.0291	1	0.02914	0.0291							0
4	0.1686	5	0.03372	0.1686							0
5	0.4381	10	0.04381	0.4381							0
6	0.9658	25	0.03863	0.9658							0
7	2.0153	50	0.04031	2.0153							0

Calib Flag: Replace

Average RF: 0.0344586

RF StdDev: 0.00654652

RF %RSD: 18.9982

RF Definition: Area / Amount

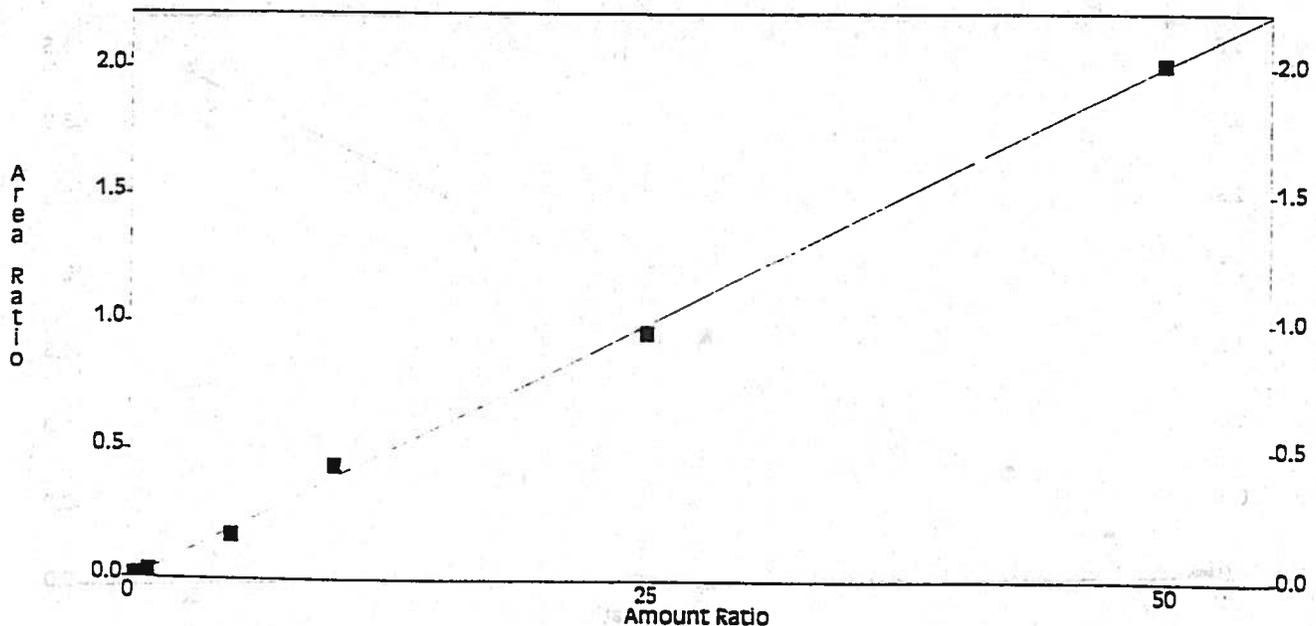
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 24.8013 x Area + 0.224594

R² = 0.998887 ✓

Internal Standard Curve - Scaling: None



Method: c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed: Jun 04, 1996 17:07:00

Channel: B

Peak: 1,1-DCE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0144	0.4	0.036	0.0144							0
2	0.0211	0.5	0.04214	0.0211							0
3	0.0436	1	0.04362	0.0436							0
4	0.2740	5	0.05481	0.2740							0
5	0.7072	10	0.07072	0.7072							0
6	1.6069	25	0.06428	1.6069							0
7	3.3853	50	0.06771	3.3853							0

Calib Flag: Replace

Average RF: 0.0541823

RF StdDev: 0.0138184

RF %RSD: 25.5036

RF Definition: Area / Amount

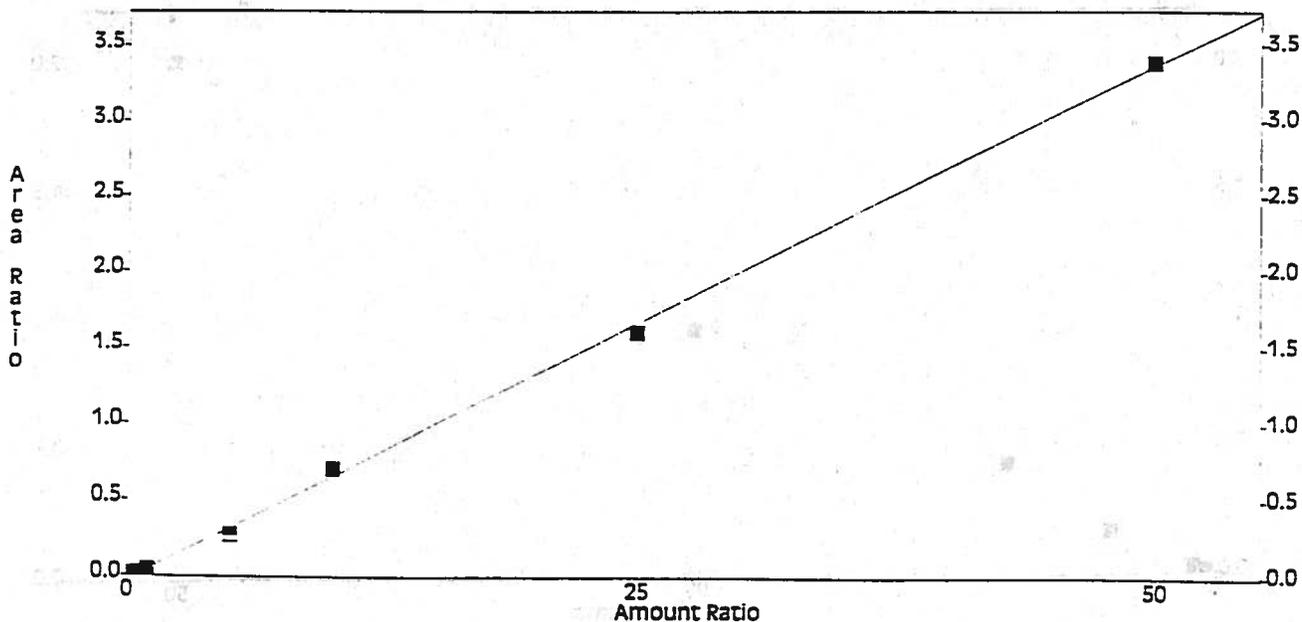
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 14.7525 x Area + 0.372868

R² = 0.999019 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:01

Channel : B

Peak : METH CHLORIDE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.8671	0.4	2.17	0.8671*							0
2	0.8629	0.5	1.73	0.8629							0
3	0.8971	1	0.8971	0.8971							0
4	1.1897	5	0.2379	1.1897							0
5	1.7474	10	0.1747	1.7474							0
6	2.6413	25	0.1057	2.6413							0
7	4.1583	50	0.08317	4.1583							0

Calib Flag: Replace

Average RF: 0.537378

RF StdDev: 0.656561

RF %RSD: 122.179

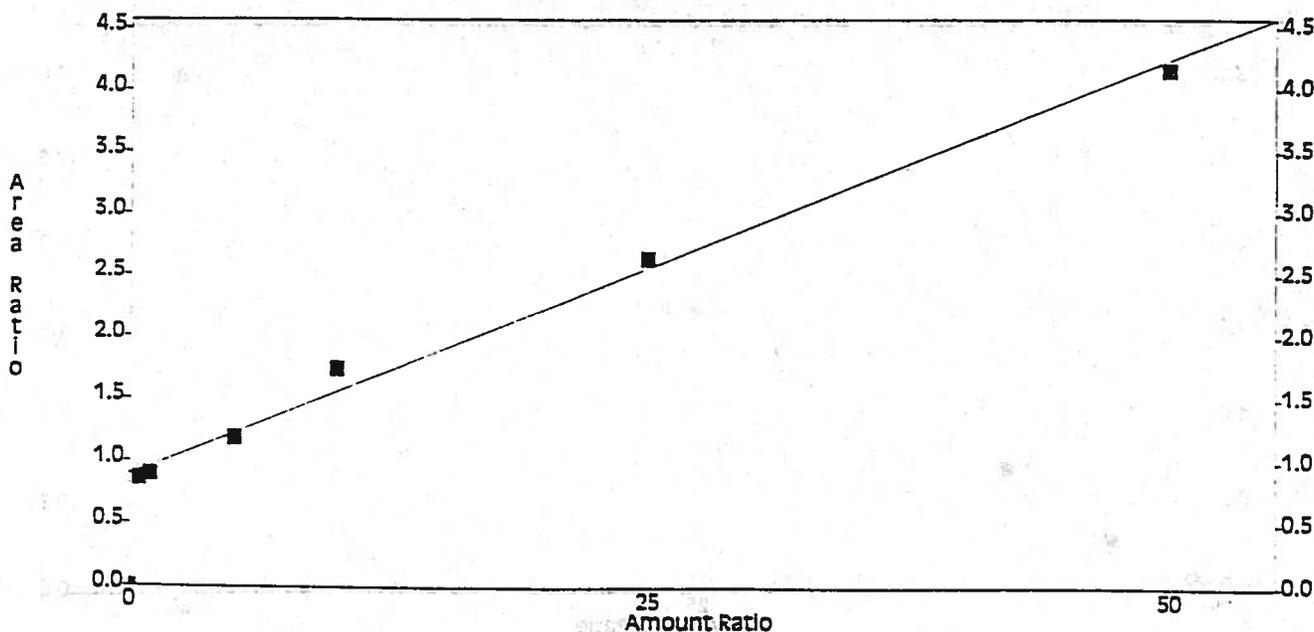
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 14.9413 x Area - 13.3792
R² = 0.993278

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:01

Channel : B

Peak : TRANS 1,2-DCE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0140	0.4	0.03501	0.0140							0
2	0.0197	0.5	0.03938	0.0197							0
3	0.0459	1	0.04591	0.0459							0
4	0.2931	5	0.05862	0.2931							0
5	0.7119	10	0.07119	0.7119							0
6	1.6185	25	0.06474	1.6185							0
7	3.0105	50	0.06021	3.0105							0

Calib Flag: Replace

Average RF: 0.0535796

RF StdDev: 0.0135989

RF %RSD: 25.3807

RF Definition: Area / Amount

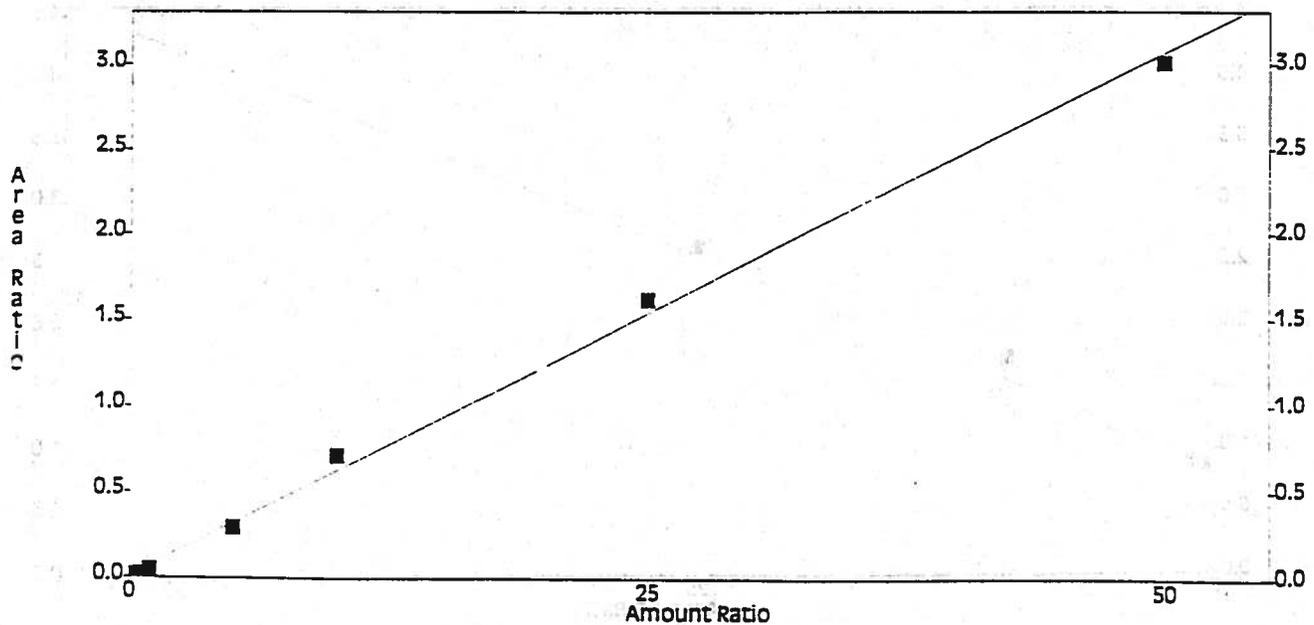
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 16.3663 x Area - 0.230217

R² = 0.997423 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:01

Channel : B

Peak : 1,1-DCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0156	0.4	0.0389	0.0156							0
2	0.0215	0.5	0.04293	0.0215							0
3	0.0480	1	0.04801	0.0480							0
4	0.2978	5	0.05957	0.2978							0
5	0.6628	10	0.06628	0.6628							0
6	1.5810	25	0.06324	1.5810							0
7	3.0738	50	0.06148	3.0738							0

Calib Flag: Replace

Average RF: 0.0543439

RF StdDev: 0.010868

RF %RSD: 19.9987

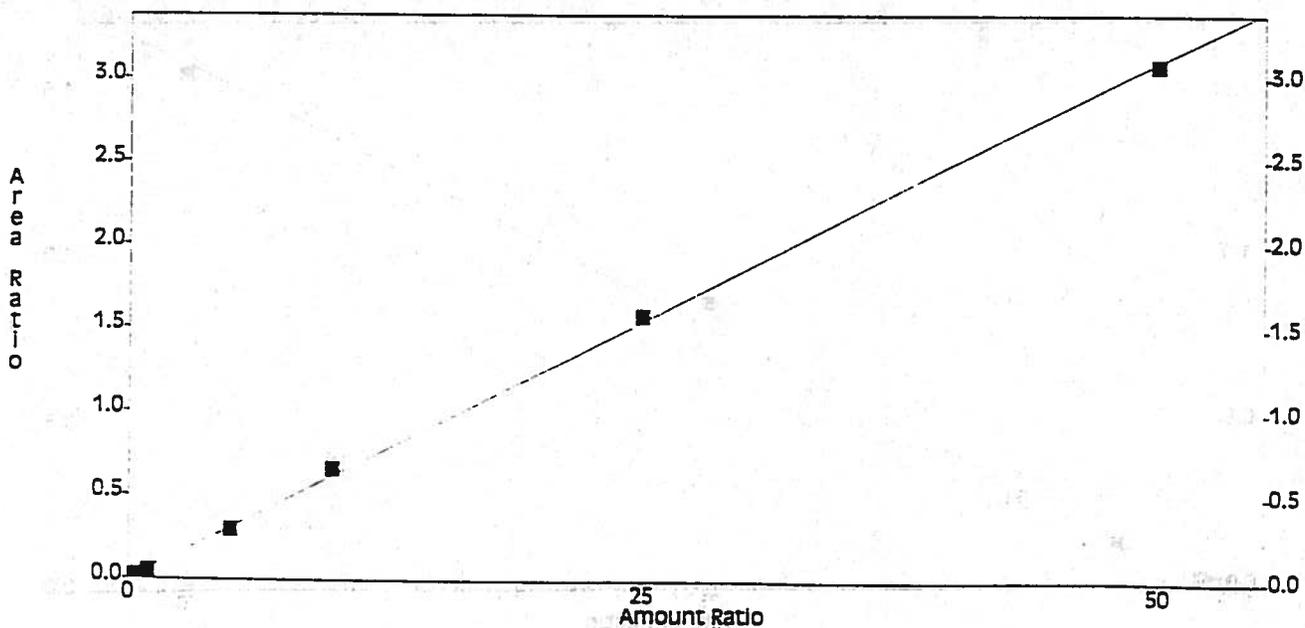
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 16.1494 x Area - 0.022885
R² = 0.999493

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:02

Channel : B

Peak : 2,2-DCPA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0084	0.4	0.02101	0.0084							0
2	0.0100	0.5	0.02005	0.0100							0
3	0.0252	1	0.02521	0.0252							0
4	0.1321	5	0.02641	0.1321							0
5	0.2768	10	0.02768	0.2768							0
6	0.8651	25	0.0346	0.8651							0
7	1.5617	50	0.03123	1.5617							0

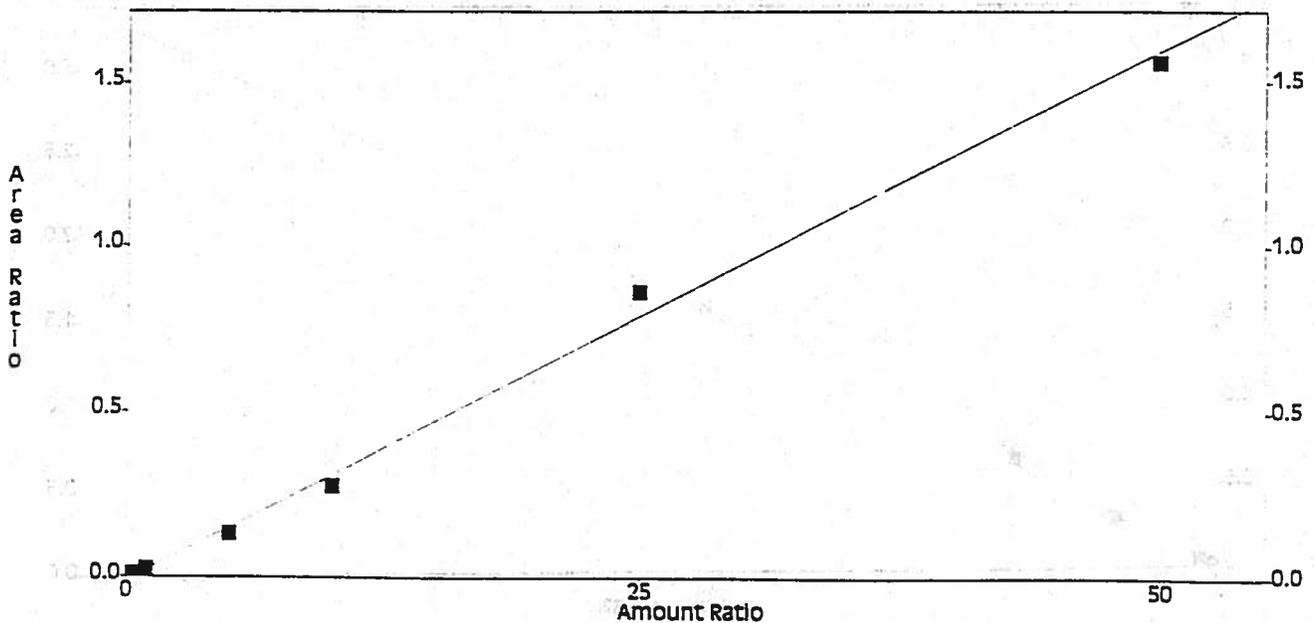
Calib Flag: Replace

Average RF: 0.0266003
RF StdDev: 0.00521016
RF %RSD: 19.5869

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 31.1614 x Area + 0.310609
R² = 0.996229

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:02

Channel : B

Peak : CIS 1,2-DCE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0209	0.4	0.05233	0.0209							0
2	0.0329	0.5	0.06588	0.0329							0
3	0.0716	1	0.0716	0.0716							0
4	0.4230	5	0.08461	0.4230							0
5	0.9573	10	0.09573	0.9573							0
6	1.9809	25	0.07924	1.9809							0
7	3.8985	50	0.07797	3.8985							0

Calib Flag: Replace

Average RF: 0.0753367

RF StdDev: 0.0138849

RF %RSD: 18.4305

RF Definition: Area / Amount

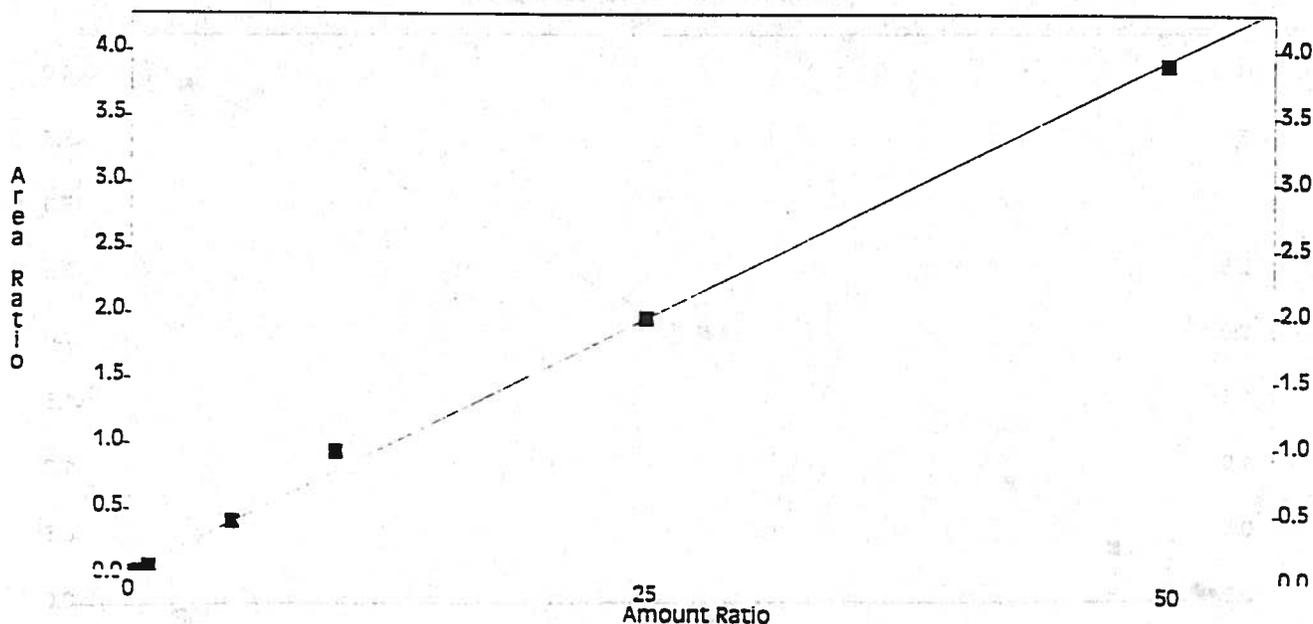
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 12.8111 x Area - 0.387548

R² = 0.997834 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:07:02
 Channel : B
 Peak : CHLOROFORM

* - Replicate Not Used

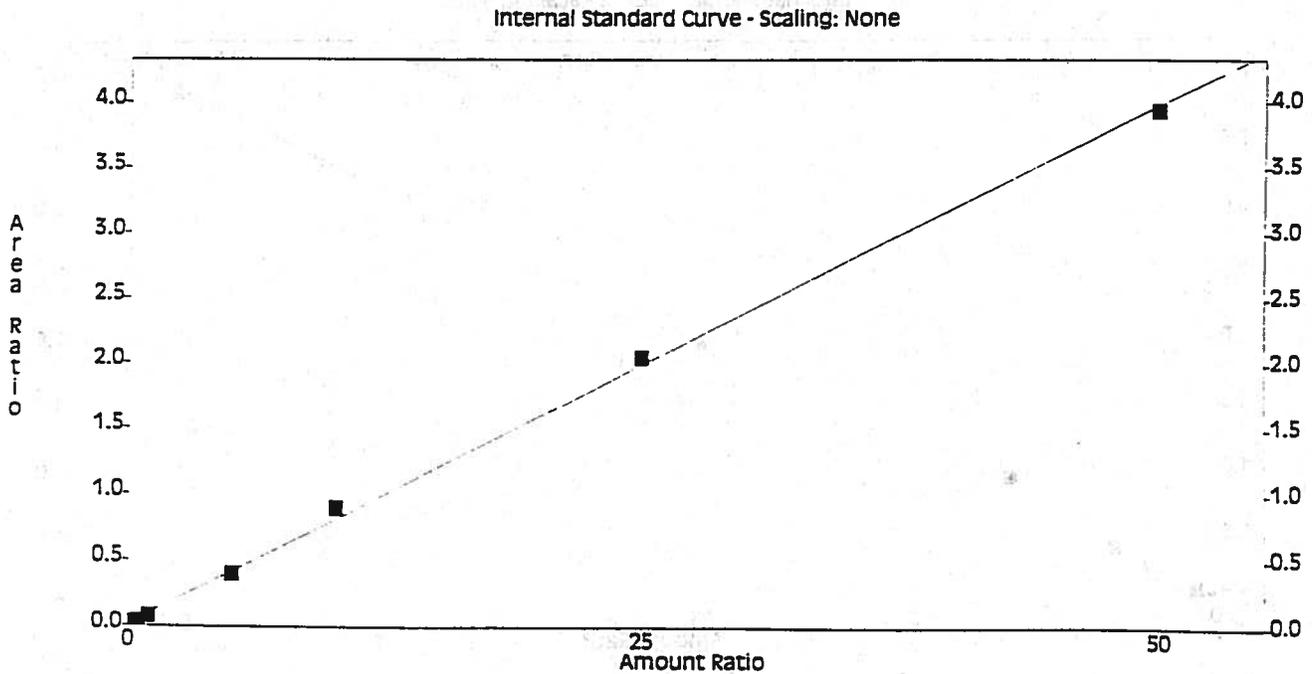
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0271	0.4	0.06771	0.0271							0
2	0.0373	0.5	0.07465	0.0373							0
3	0.0767	1	0.07674	0.0767							0
4	0.4012	5	0.08023	0.4012							0
5	0.9029	10	0.09029	0.9029							0
6	2.0556	25	0.08222	2.0556							0
7	3.9391	50	0.07878	3.9391							0

Calib Flag: Replace

Average RF: 0.0786613
 RF StdDev: 0.00695157
 RF %RSD: 8.83735

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 12.6231 x Area - 0.287703
 $R^2 = 0.998847$ ✓



Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0074	0.4	0.01838	0.0074							0
2	0.0093	0.5	0.01865	0.0093							0
3	0.0279	1	0.0279	0.0279							0
4	0.1902	5	0.03804	0.1902							0
5	0.4760	10	0.0476	0.4760							0
6	1.0601	25	0.0424	1.0601							0
7	2.1333	50	0.04267	2.1333							0

Calib Flag: Replace

Average RF: 0.0336615

RF StdDev: 0.0119942

RF %RSD: 35.6317

RF Definition: Area / Amount

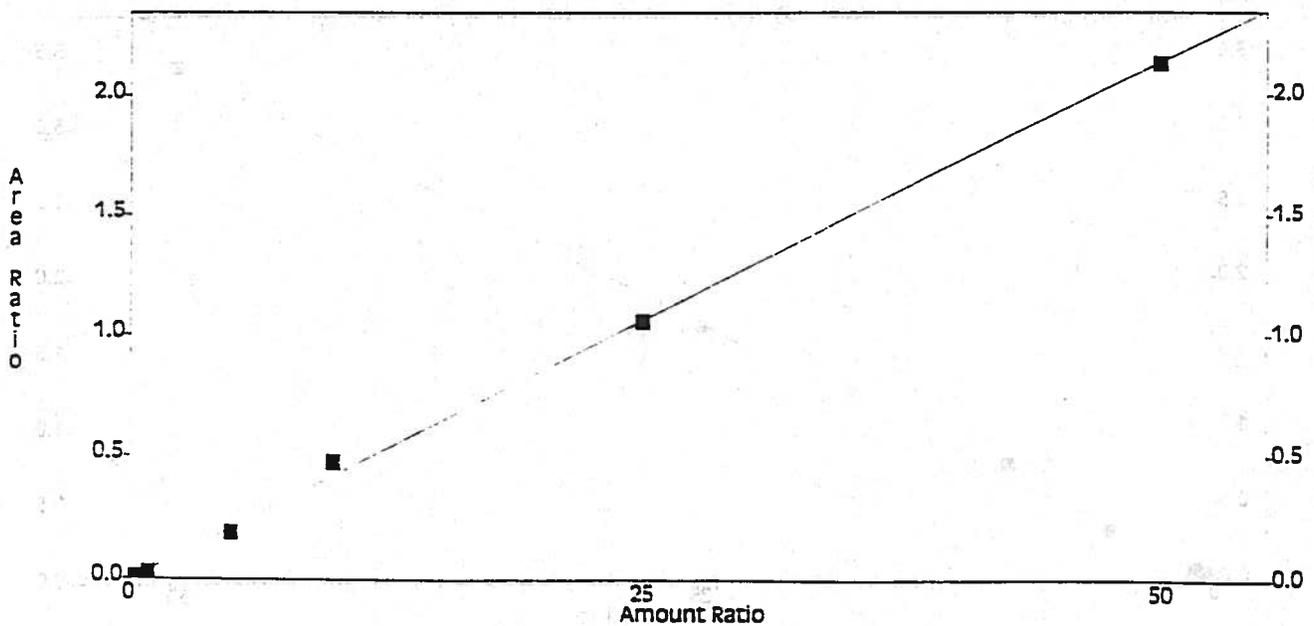
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 23.3077 x Area + 0.129143

R² = 0.99911 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:07:03
 Channel : B
 Peak : 1,1,1-TCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0203	0.4	0.05063	0.0203							0
2	0.0287	0.5	0.05733	0.0287							0
3	0.0646	1	0.06461	0.0646							0
4	0.3311	5	0.06622	0.3311							0
5	0.7803	10	0.07803	0.7803							0
6	1.7010	25	0.06804	1.7010							0
7	3.4141	50	0.06828	3.4141							0

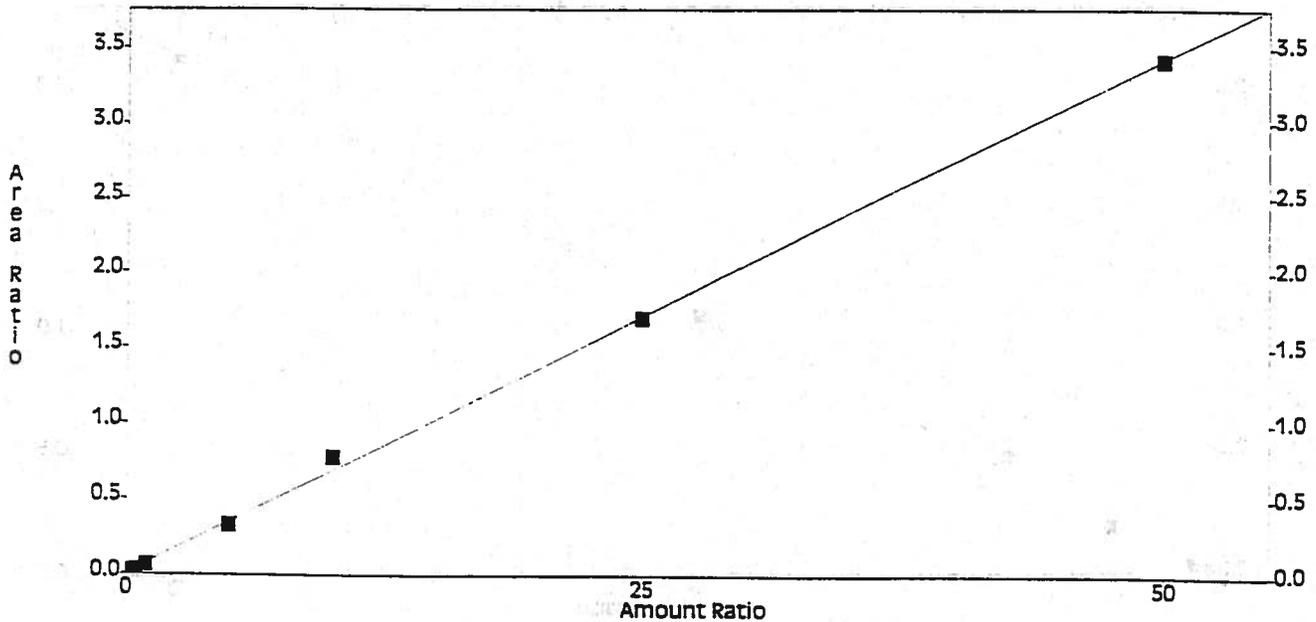
Calib Flag: Replace

Average RF: 0.064735
 RF StdDev: 0.00872099
 RF %RSD: 13.4718

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 14.6404 x Area - 0.131616
 $R^2 = 0.999042$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met * - Replicate Not Used

Printed : Jun 04, 1996 17:07:03

Channel : B

Peak : 1,1-DCPE

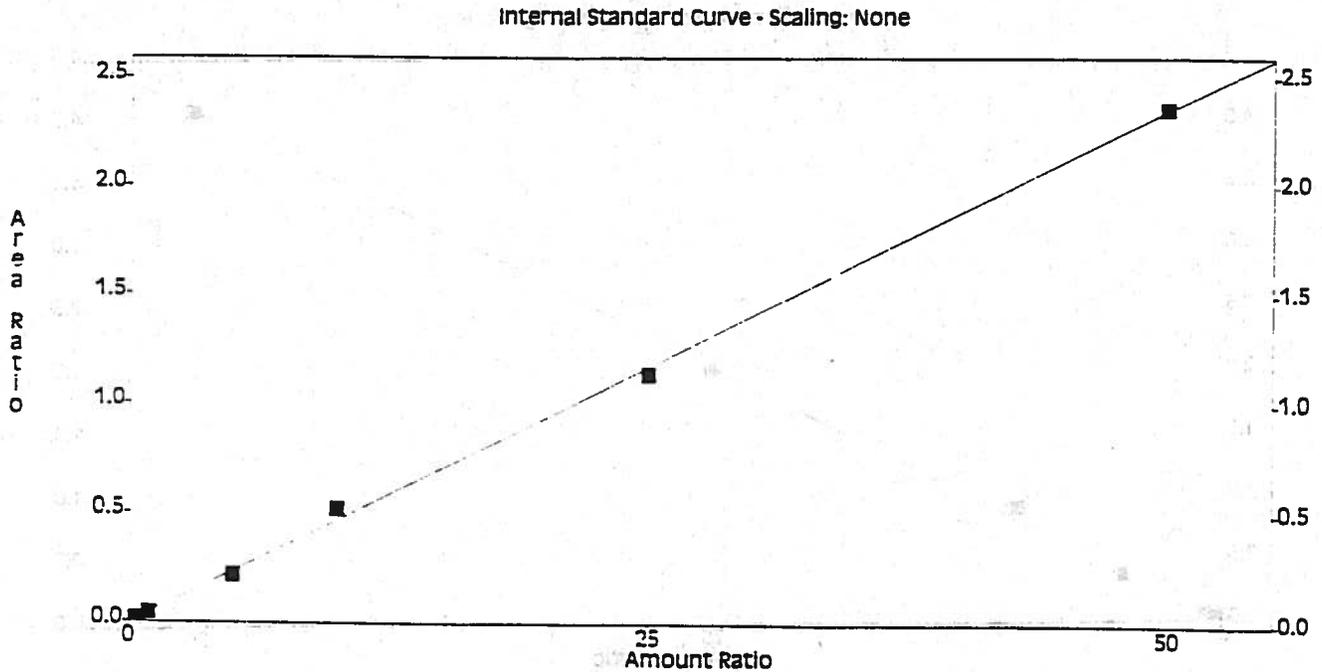
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0124	0.4	0.03095	0.0124							0
2	0.0191	0.5	0.03816	0.0191							0
3	0.0429	1	0.04294	0.0429							0
4	0.2168	5	0.04335	0.2168							0
5	0.5213	10	0.05213	0.5213							0
6	1.1410	25	0.04564	1.1410							0
7	2.3571	50	0.04714	2.3571							0

Calib Flag: Replace

Average RF: 0.0429044
RF StdDev: 0.00678301
RF %RSD: 15.8096

F Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 21.2491 x Area + 0.0432505
R² = 0.999064



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:04

Channel : B

Peak : CARBON TET

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0196	0.4	0.04889	0.0196							0
2	0.0306	0.5	0.0612	0.0306							0
3	0.0693	1	0.06932	0.0693							0
4	0.3796	5	0.07592	0.3796							0
5	0.9197	10	0.09197	0.9197							0
6	2.0259	25	0.08103	2.0259							0
7	4.0930	50	0.08186	4.0930							0

Calib Flag: Replace

Average RF: 0.0728856

RF StdDev: 0.0144094

RF %RSD: 19.7698

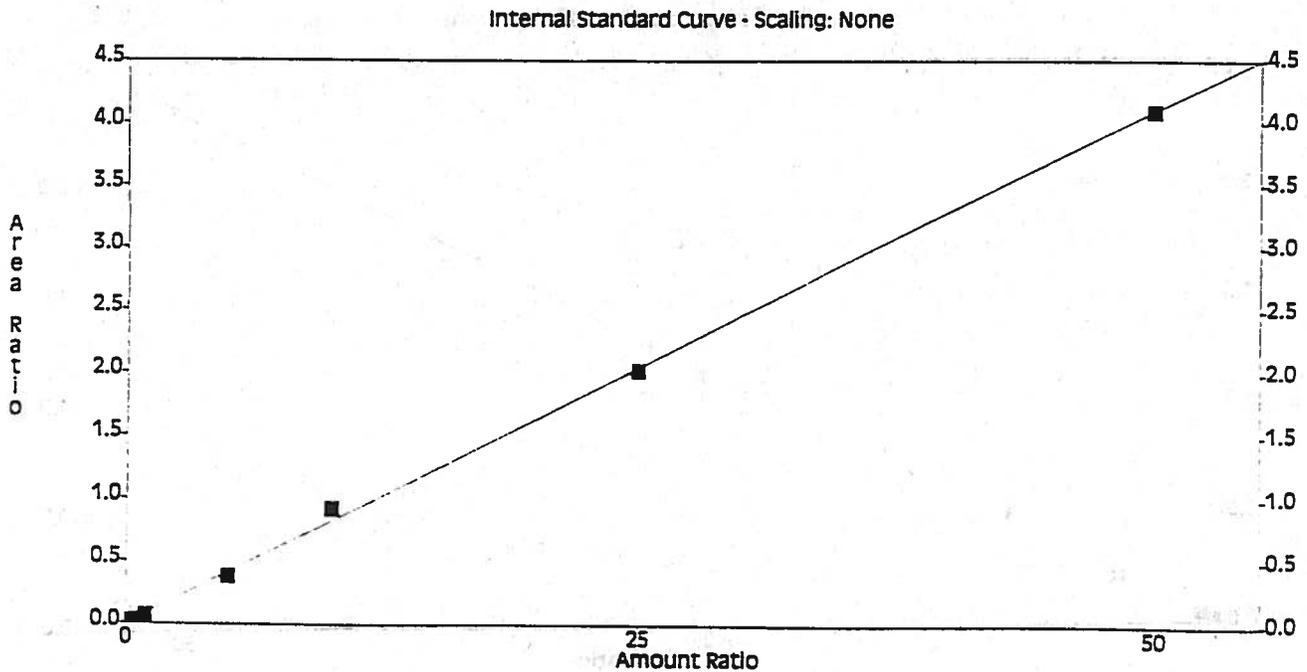
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 12.1958 x/Area - 0.00408939

R² = 0.999131



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:04

Channel : B

Peak : 1,2-DCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0141	0.4	0.03524	0.0141							0
2	0.0193	0.5	0.03854	0.0193							0
3	0.0457	1	0.04574	0.0457							0
4	0.2536	5	0.05073	0.2536							0
5	0.5945	10	0.05945	0.5945							0
6	1.3719	25	0.05488	1.3719							0
7	2.7415	50	0.05483	2.7415							0

Calib Flag: Replace

Average RF: 0.0484859

RF StdDev: 0.00902294

RF %RSD: 18.6094

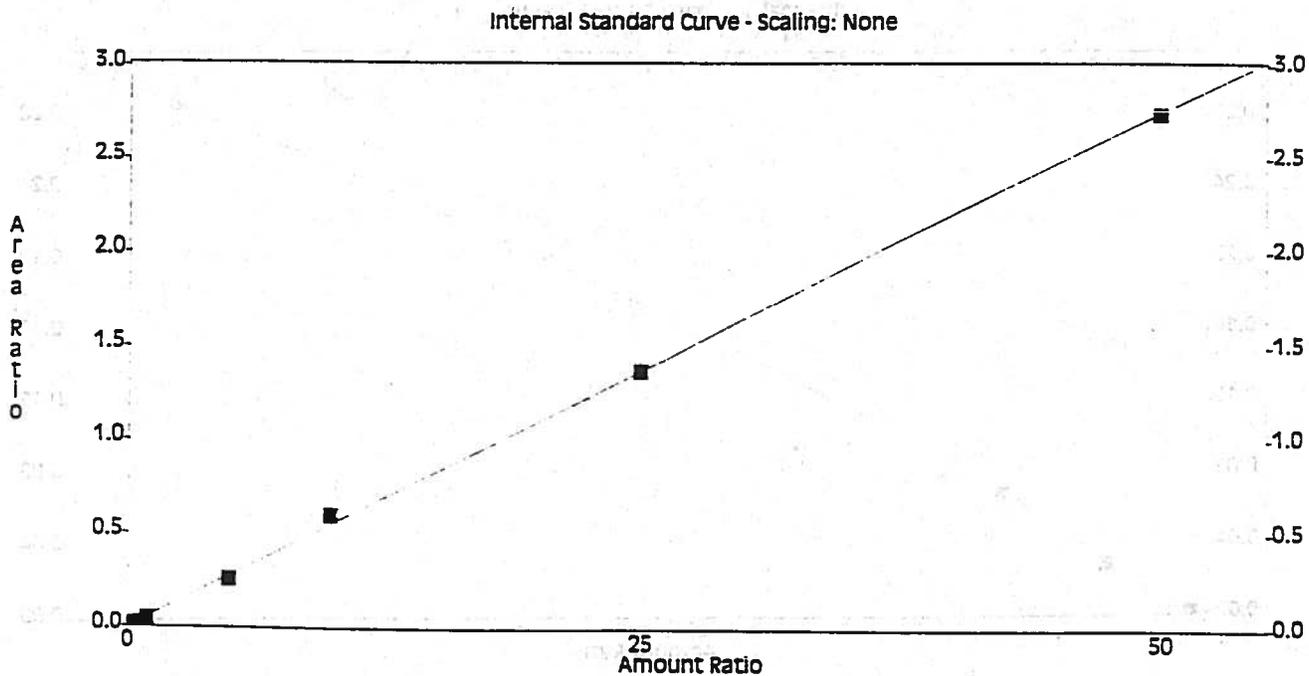
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 18.1738 x Area + 0.0416979

R² = 0.999562



Method : c:\ezchrom\chrom\3voa0603.met * - Replicate Not Used
 Printed : Jun 05, 1996 10:52:34
 Channel : B
 Peak : 2-CL ETH VI ETH

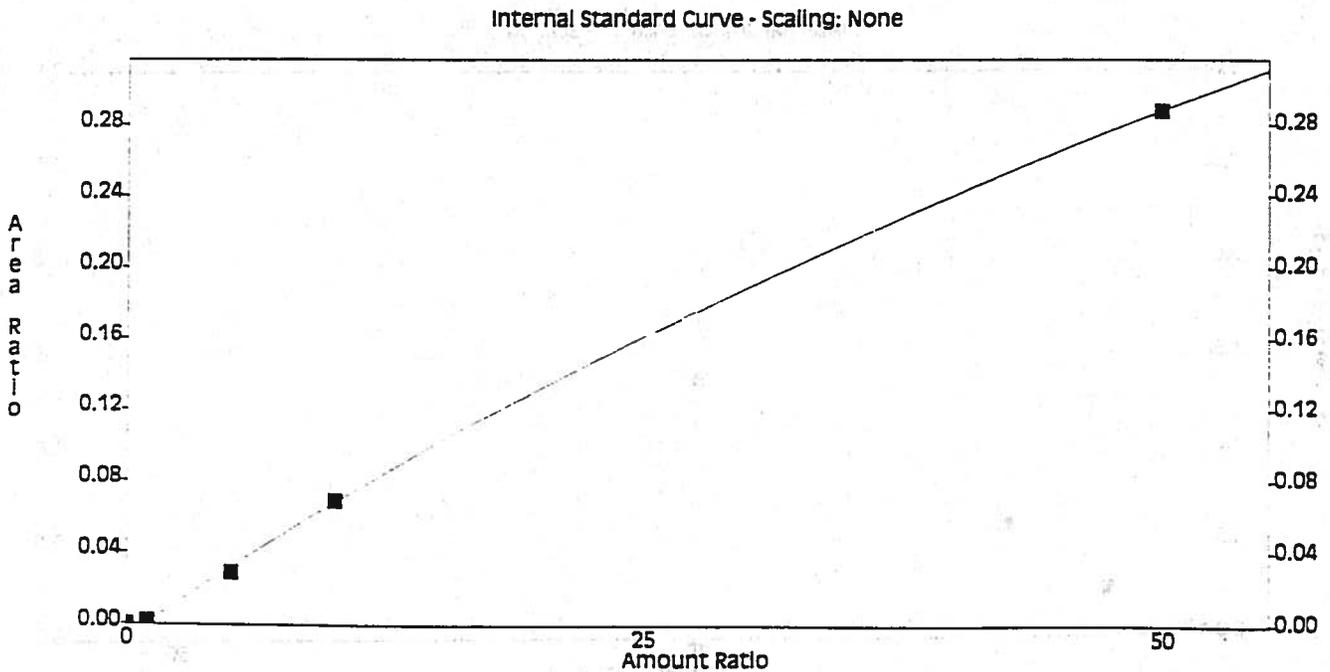
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0208	0.4	0.05197	0.0208*							0
3	0.0020	1	0.001973	0.0020							0
4	0.0289	5	0.005782	0.0289							0
5	0.0691	10	0.006905	0.0691							0
6	0.2010	25	0.008039	0.2010*							0
7	0.2881	50	0.005761	0.2881							0

Calib Flag: Replace

Average RF: 0.00510543
 RF StdDev: 0.00215565
 RF %RSD: 42.2226

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Quadratic Fit: Amount = 167.819 x Area^2 + 121.874 x Area + 0.961832
 R^2 = 0.999861 ✓



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:05

Channel : B

Peak : TCE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0191	0.4	0.04772	0.0191							0
2	0.0406	0.5	0.08118	0.0406							0
3	0.0674	1	0.06738	0.0674							0
4	0.3397	5	0.06795	0.3397							0
5	0.7927	10	0.07927	0.7927							0
6	1.7538	25	0.07015	1.7538							0
7	3.3894	50	0.06779	3.3894							0

Calib Flag: Replace

Average RF: 0.0687788

RF StdDev: 0.0108987

RF %RSD: 15.846

RF Definition: Area / Amount

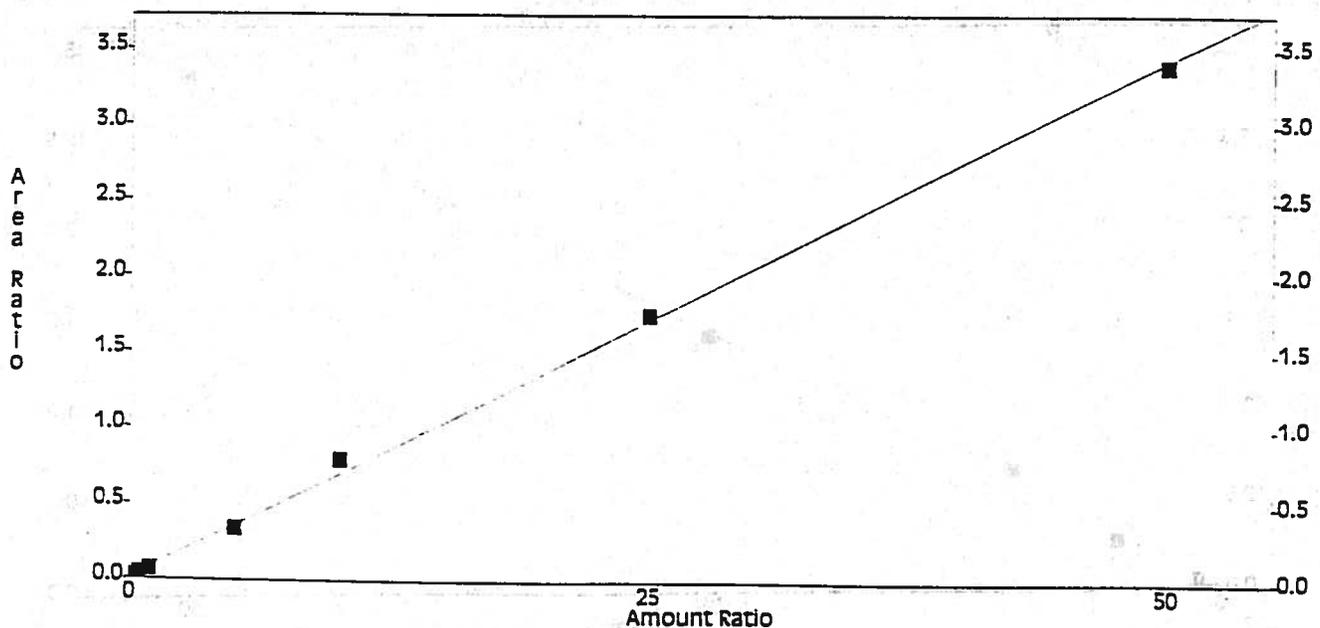
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 14.6944 x Area - 0.312135

R^2 = 0.998683

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:05

Channel : B

Peak : 1,2-DCPA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0167	0.4	0.04174	0.0167							0
2	0.0232	0.5	0.04635	0.0232							0
3	0.0524	1	0.05236	0.0524							0
4	0.2730	5	0.05459	0.2730							0
5	0.6684	10	0.06684	0.6684							0
6	1.4241	25	0.05697	1.4241							0
7	2.8680	50	0.05736	2.8680							0

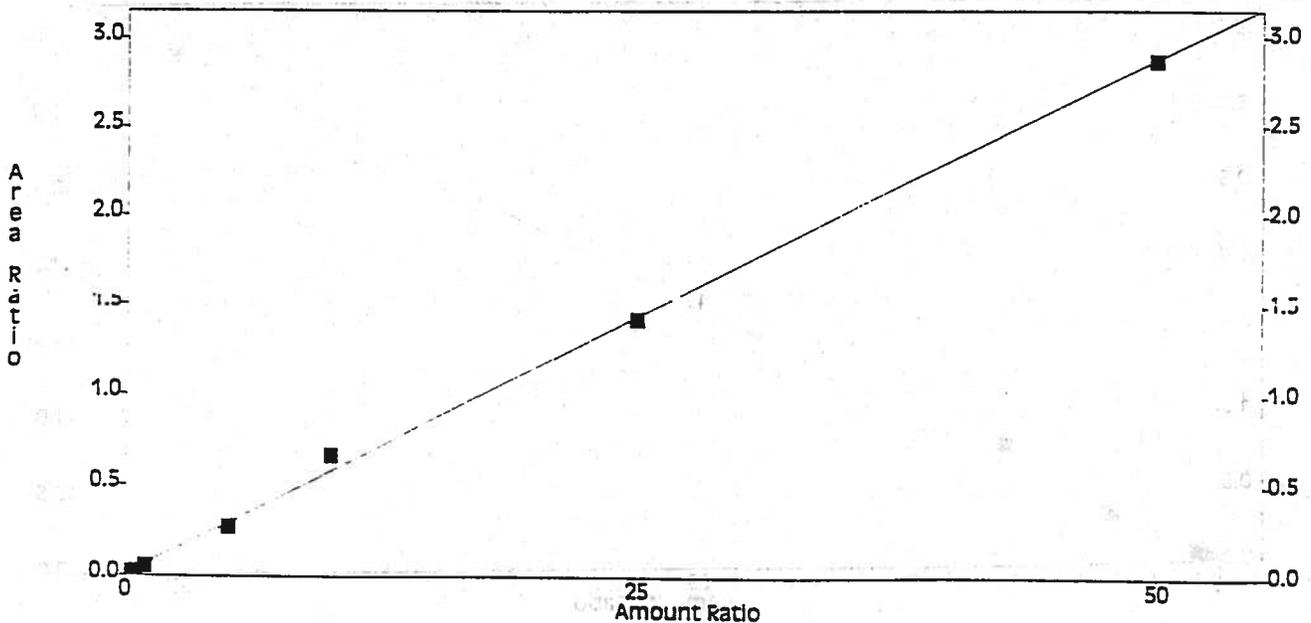
Calib Flag: Replace

Average RF: 0.055723
RF StdDev: 0.00812901
RF %RSD: 15.1255

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 17.4243 x Area - 0.128183
R² = 0.99867

Internal Standard Curve - Scaling: None



Inte: Jun 04, 1996 17:07:05

annel: B

CK: BRDICLMETHANE

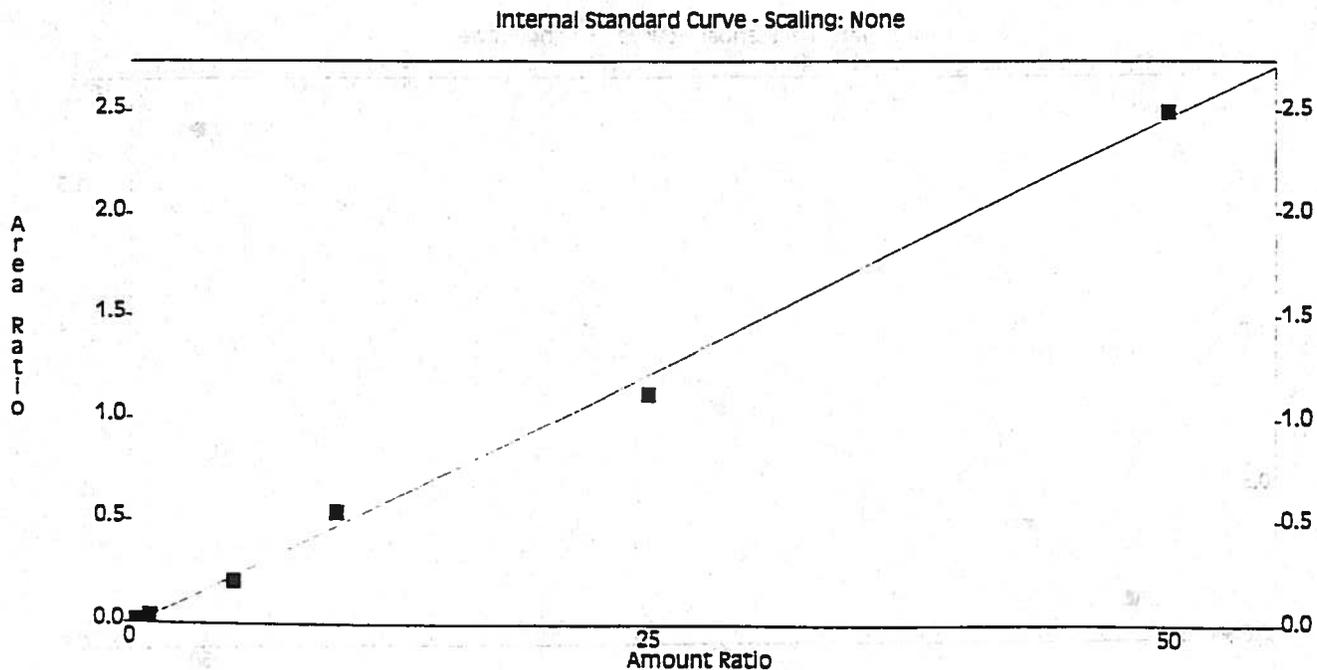
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0089	0.4	0.02235	0.0089							0
2	0.0130	0.5	0.02601	0.0130							0
3	0.0356	1	0.03563	0.0356							0
4	0.2079	5	0.04157	0.2079							0
5	0.5466	10	0.05466	0.5466							0
6	1.1292	25	0.04517	1.1292							0
7	2.4962	50	0.04992	2.4962							0

Calib Flag: Replace

Average RF: 0.0393311
 StdDev: 0.0120138
 RF %RSD: 30.5454

RF Definition: Area / Amount
 Weighting Method: None
 Plot Through Zero: No

Linear Fit: Amount = 20.1193 x Area + 0.374418
 R² = 0.997006



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:07:06
 Channel : B
 Peak : DIBROMOMETHANE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0023	0.4	0.005736	0.0023							0
2	0.0052	0.5	0.0103	0.0052							0
3	0.0157	1	0.0157	0.0157							0
4	0.1375	5	0.02751	0.1375							0
5	0.3806	10	0.03806	0.3806							0
6	0.7735	25	0.03094	0.7735							0
7	1.6938	50	0.03388	1.6938							0

Calib Flag: Replace

Average RF: 0.0231555

RF StdDev: 0.0125253

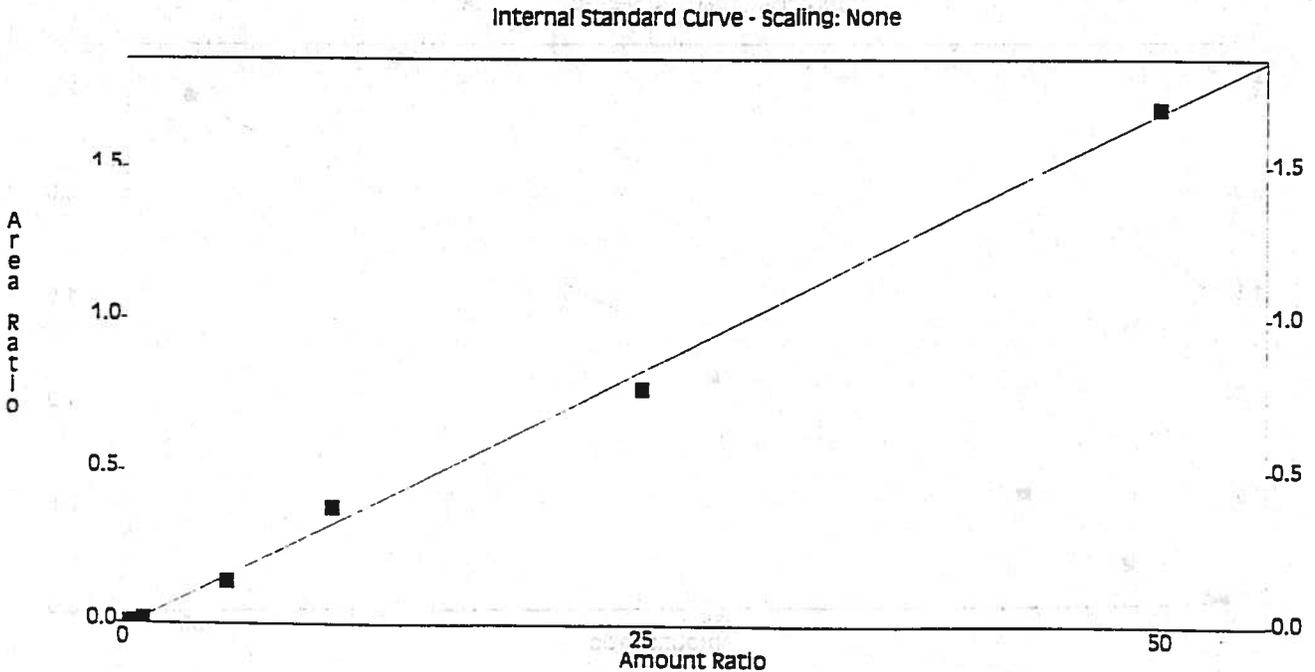
RF %RSD: 54.092

RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 29.5278 / x Area + 0.437846
 $R^2 = 0.99694$



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:06

Channel : B

Peak : CIS 1,3-DCPE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0124	0.4	0.03095	0.0124							0
2	0.0168	0.5	0.03368	0.0168							0
3	0.0389	1	0.03888	0.0389							0
4	0.2169	5	0.04338	0.2169							0
5	0.5425	10	0.05425	0.5425							0
6	1.1399	25	0.0456	1.1399							0
7	2.3281	50	0.04656	2.3281							0

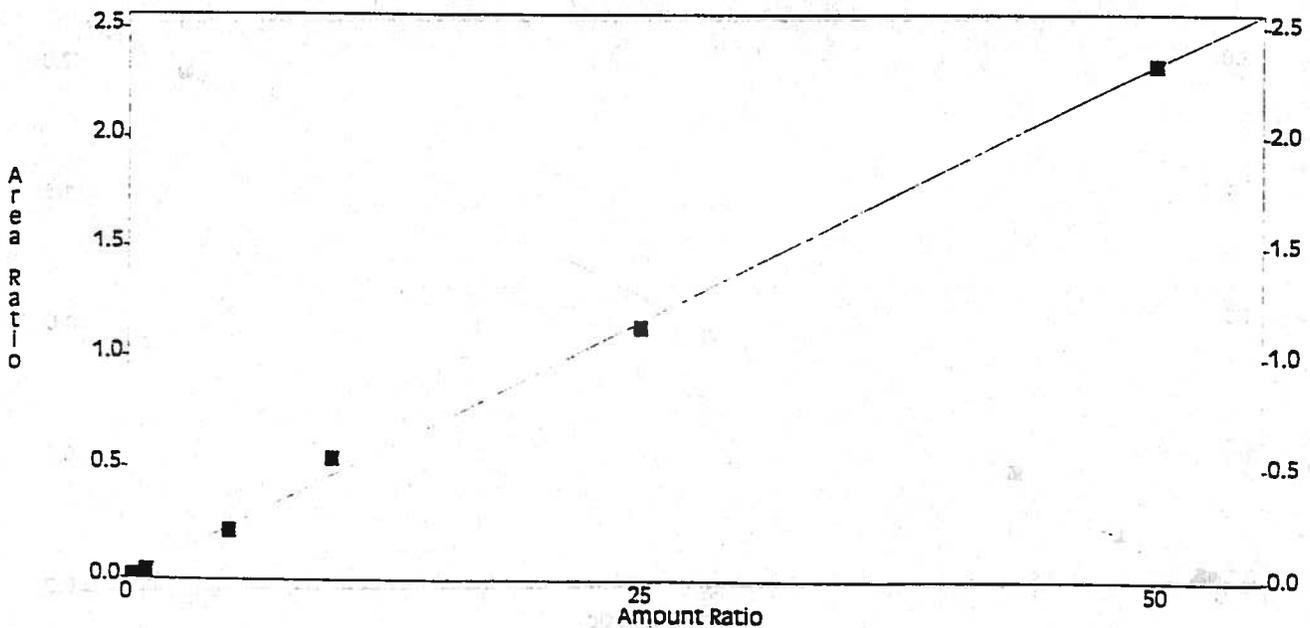
Calib Flag: Replace

Average RF: 0.0418989
RF StdDev: 0.00802854
RF %RSD: 19.1617

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 21.4762 x Area - 0.0500662
R² = 0.999455 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

Printed : Jun 04, 1996 17:07:06

Channel : B

Peak : TRANS 1,3-DCPE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0101	0.4	0.02528	0.0101							0
2	0.0133	0.5	0.02659	0.0133							0
3	0.0298	1	0.0298	0.0298							0
4	0.1836	5	0.03672	0.1836							0
5	0.4334	10	0.04334	0.4334							0
6	0.9590	25	0.03836	0.9590							0
7	1.9715	50	0.03943	1.9715							0

Calib Flag: Replace

Average RF: 0.034218

RF StdDev: 0.00696892

RF %RSD: 20.3662

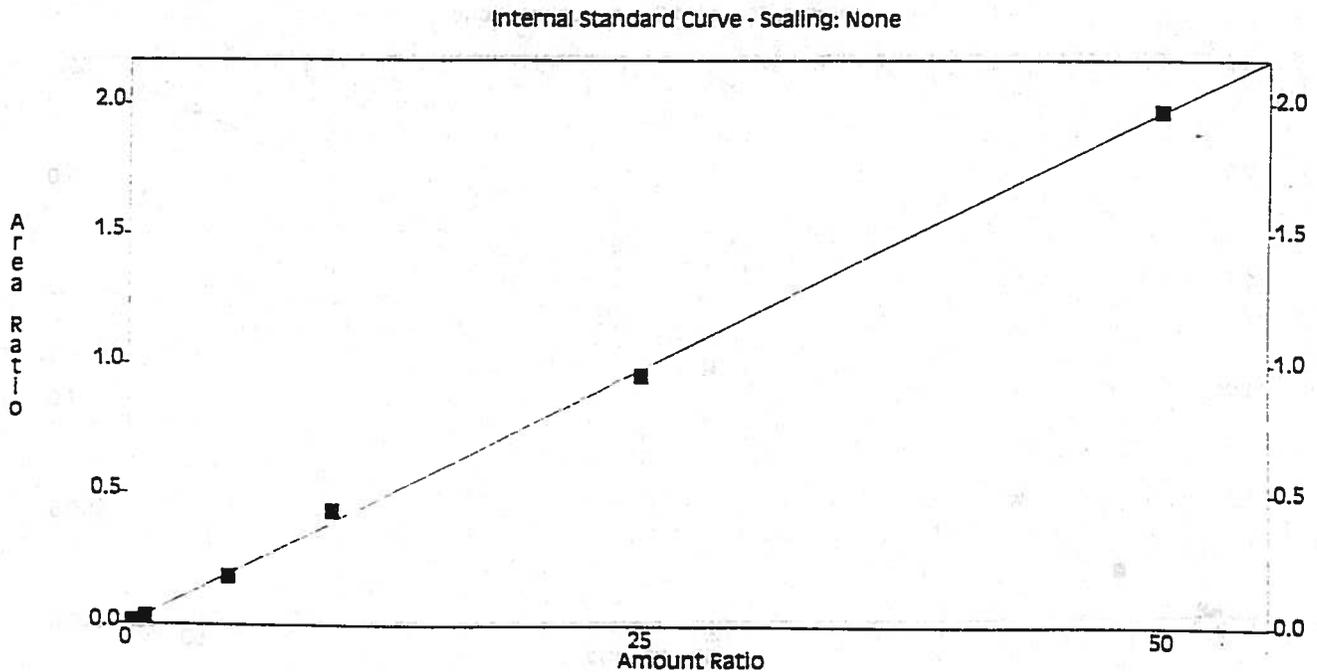
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 25.3606 * Area + 0.0834646

R² = 0.999206



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:07

Channel : B

Peak : 1,1,2-TCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0140	0.4	0.03507	0.0140							0
2	0.0178	0.5	0.03558	0.0178							0
3	0.0428	1	0.04282	0.0428							0
4	0.2419	5	0.04838	0.2419							0
5	0.5606	10	0.05606	0.5606							0
6	1.2655	25	0.05062	1.2655							0
7	2.7266	50	0.05453	2.7266							0

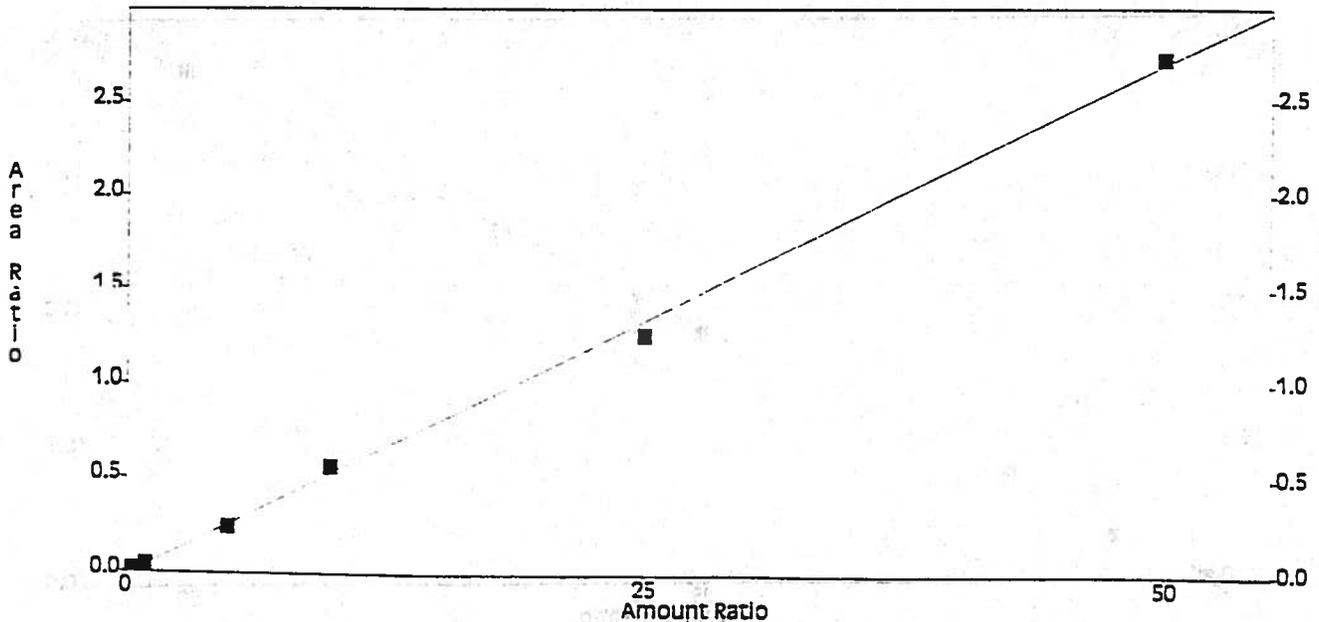
Calib Flag: Replace

Average RF: 0.0481241
RF StdDev: 0.00855479
RF %RSD: 18.5361

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 18.4126 x Area + 0.320726
R² = 0.998677 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:07

Channel : B

Peak : 1,3-DCPA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0093	0.4	0.02316	0.0093							0
2	0.0126	0.5	0.02527	0.0126							0
3	0.0287	1	0.02872	0.0287							0
4	0.1620	5	0.0324	0.1620							0
5	0.3984	10	0.03984	0.3984							0
6	0.9167	25	0.03667	0.9167							0
7	1.8842	50	0.03768	1.8842							0

Calib Flag: Replace

Average RF: 0.031964

RF StdDev: 0.00645261

RF %RSD: 20.1871

RF Definition: Area / Amount

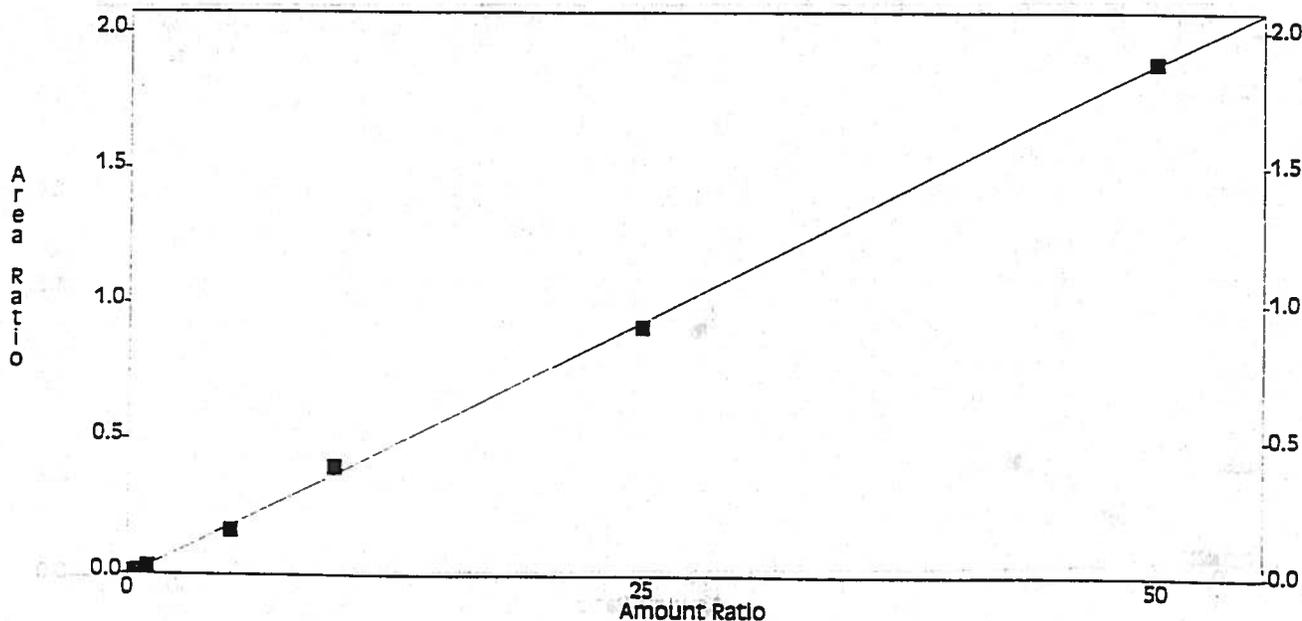
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 26.4852 x / Area + 0.219282

R² = 0.999458

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:07

Channel : B

Peak : PCE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0223	0.4	0.05573	0.0223							0
2	0.0318	0.5	0.06351	0.0318							0
3	0.0715	1	0.07149	0.0715							0
4	0.0853	5	0.07706	0.0853							0
5	0.8860	10	0.0886	0.8860							0
6	1.9043	25	0.07617	1.9043							0
7	3.8667	50	0.07733	3.8667							0

Calib Flag: Replace

Average RF: 0.0728419

RF StdDev: 0.0106391

RF %RSD: 14.6058

RF Definition: Area / Amount

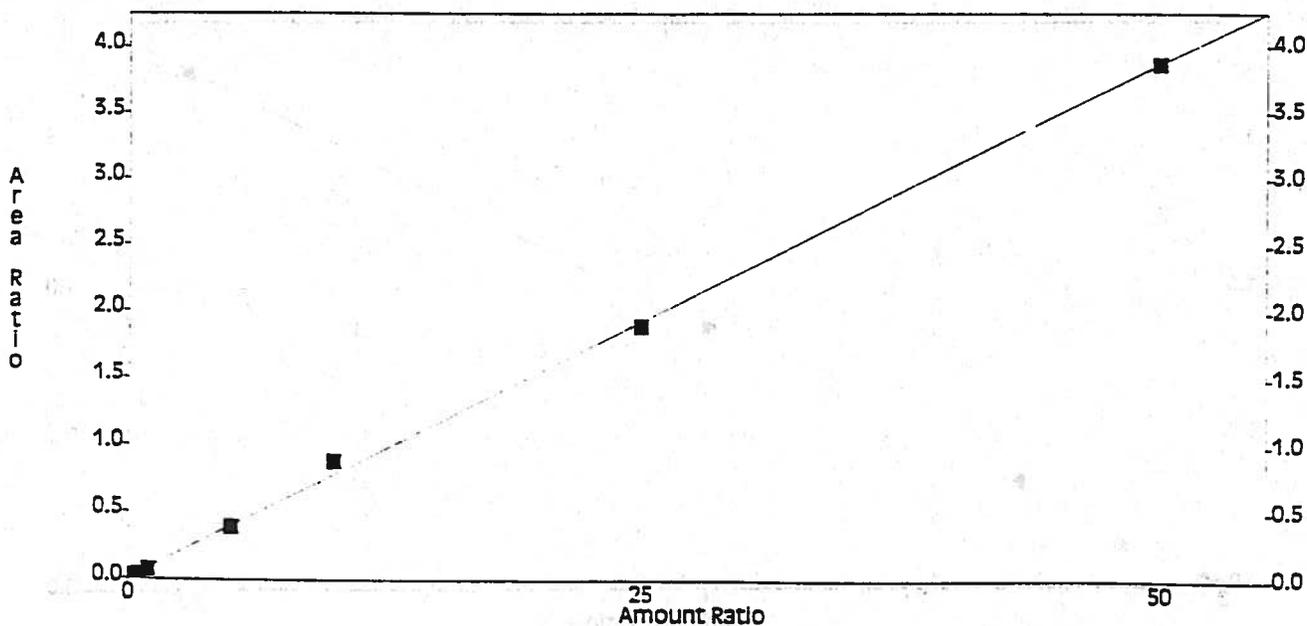
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 12.9512 x Area - 0.133217

R^2 = 0.998927

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:08

Channel : B

Peak : DIBRCLMETHANE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0037	0.4	0.00924	0.0037							0
2	0.0048	0.5	0.009619	0.0048							0
3	0.0155	1	0.01555	0.0155							0
4	0.1370	5	0.0274	0.1370							0
5	0.3532	10	0.03532	0.3532							0
6	0.8764	25	0.03506	0.8764							0
7	1.7287	50	0.03457	1.7287							0

Calib Flag: Replace

Average RF: 0.0238217

RF StdDev: 0.0120386

RF %RSD: 50.5362

RF Definition: Area / Amount

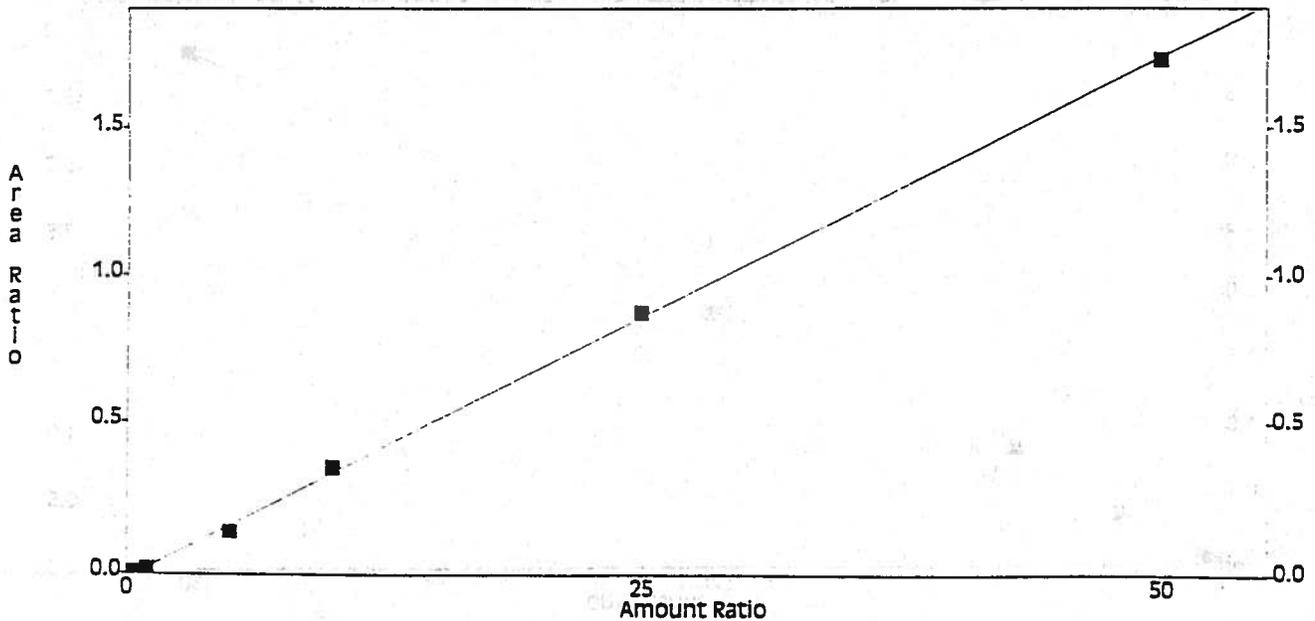
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 28.5348 x Area + 0.412961

R² = 0.999519 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:08

Channel : B

Peak : 1,2-DBEA(EDB)

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0029	0.4	0.007267	0.0029*							0
2	0.0022	0.5	0.004399	0.0022							0
3	0.0079	1	0.007916	0.0079							0
4	0.0770	5	0.01541	0.0770							0
5	0.2085	10	0.02085	0.2085							0
6	0.4941	25	0.01977	0.4941							0
7	1.0410	50	0.02082	1.0410							0

Calib Flag: Replace

Average RF: 0.01486

RF StdDev: 0.00711932

RF %RSD: 47.9094

RF Definition: Area / Amount

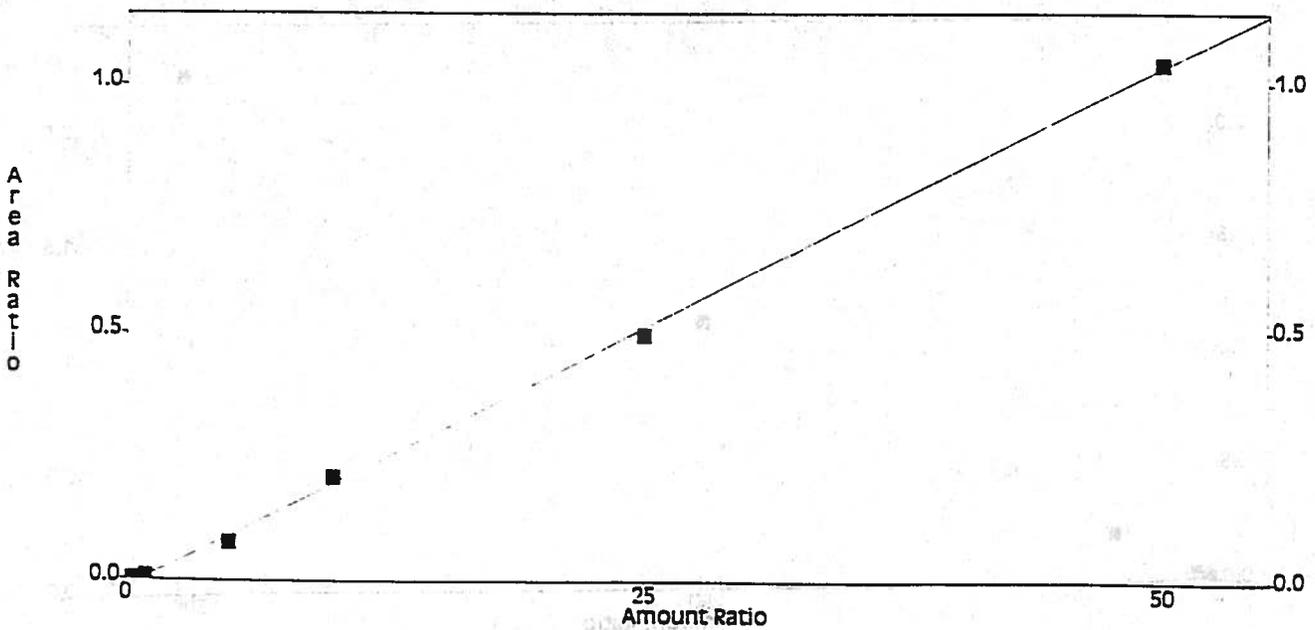
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 47.5931 x Area + 0.727931

R² = 0.999162 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:08

Channel : B

Peak : 1CL4FBZ (SURR)

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0141	4	0.003527	0.0141							0
2	0.0186	5	0.003718	0.0186							0
3	0.0377	10	0.003768	0.0377							0
4	0.2173	50	0.004346	0.2173							0
5	0.5029	100	0.005029	0.5029							0
6	1.1645	250	0.004658	1.1645							0
7	2.2609	500	0.004522	2.2609							0

Calib Flag: Replace

Average RF: 0.004224

RF StDev: 0.000561026

RF %RSD: 13.2819

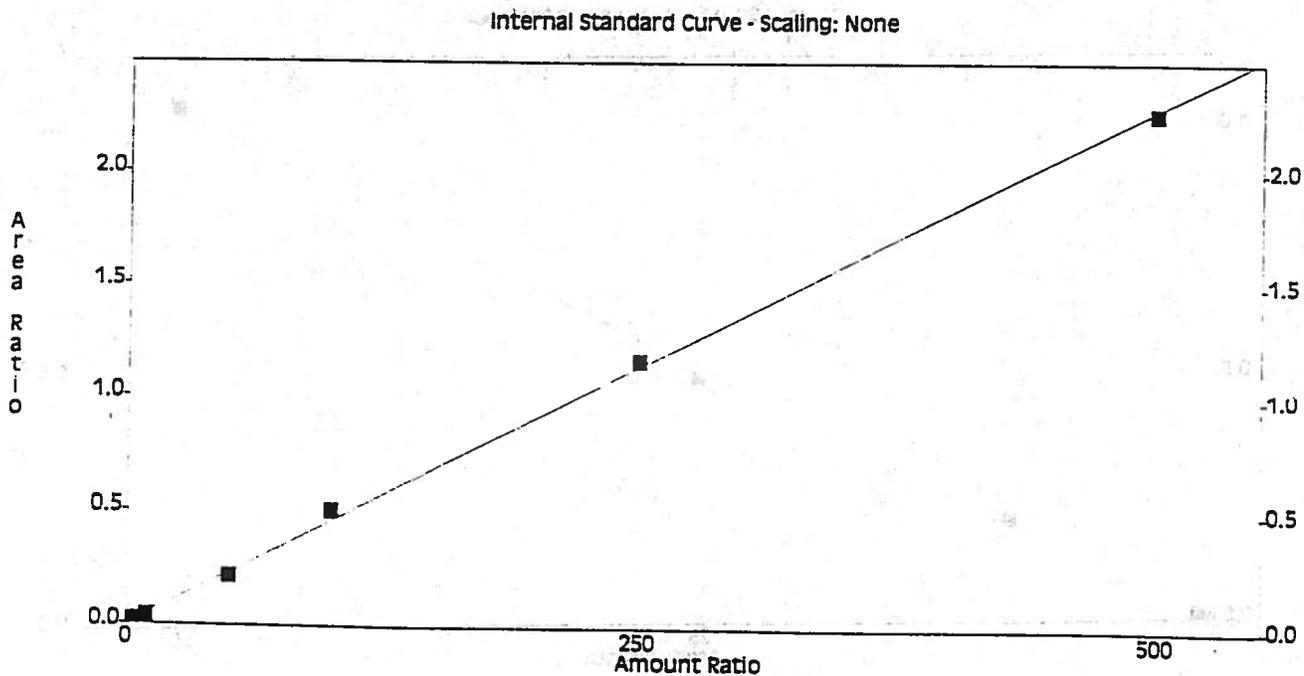
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 219.768 x Area - 1.07567

R² = 0.999233



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:08

Channel : B

Peak : CHLOROBENZENE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0041	0.4	0.01013	0.0041							0
2	0.0054	0.5	0.01081	0.0054							0
3	0.0123	1	0.01231	0.0123							0
4	0.0977	5	0.01955	0.0977							0
5	0.1808	10	0.01808	0.1808							0
6	0.4338	25	0.01735	0.4338							0
7	0.8264	50	0.01653	0.8264							0

Calib Flag: Replace

Average RF: 0.0149652

RF StdDev: 0.0037978

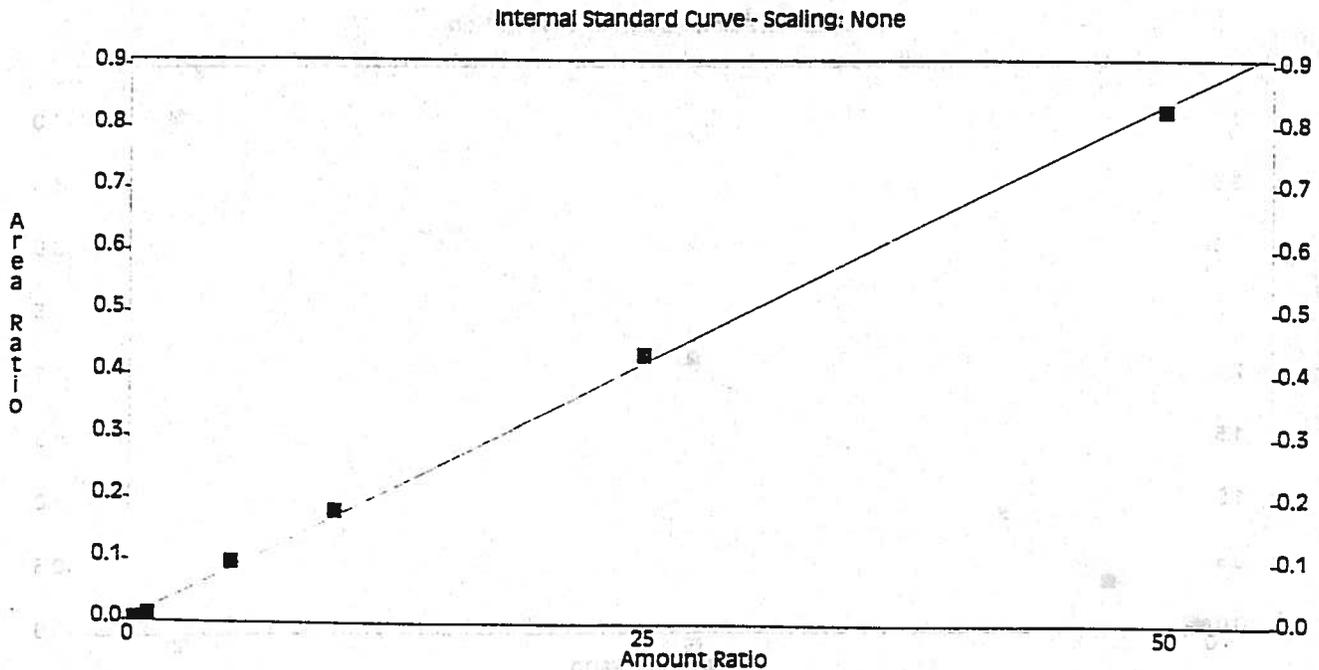
RF %RSD: 25.3775

RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 60.0877 x Area - 0.266739
R² = 0.998834 ✓



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:09

Channel : B

Peak : 1,1,1,2-PCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0220	0.4	0.05511	0.0220							0
2	0.0320	0.5	0.06392	0.0320							0
3	0.0728	1	0.07284	0.0728							0
4	0.3911	5	0.07823	0.3911							0
5	0.9240	10	0.0924	0.9240							0
6	2.1744	25	0.08698	2.1744							0
7	4.0687	50	0.08137	4.0687							0

Calib Flag: Replace

Average RF: 0.0758351

RF StdDev: 0.0130084

RF %RSD: 17.1535

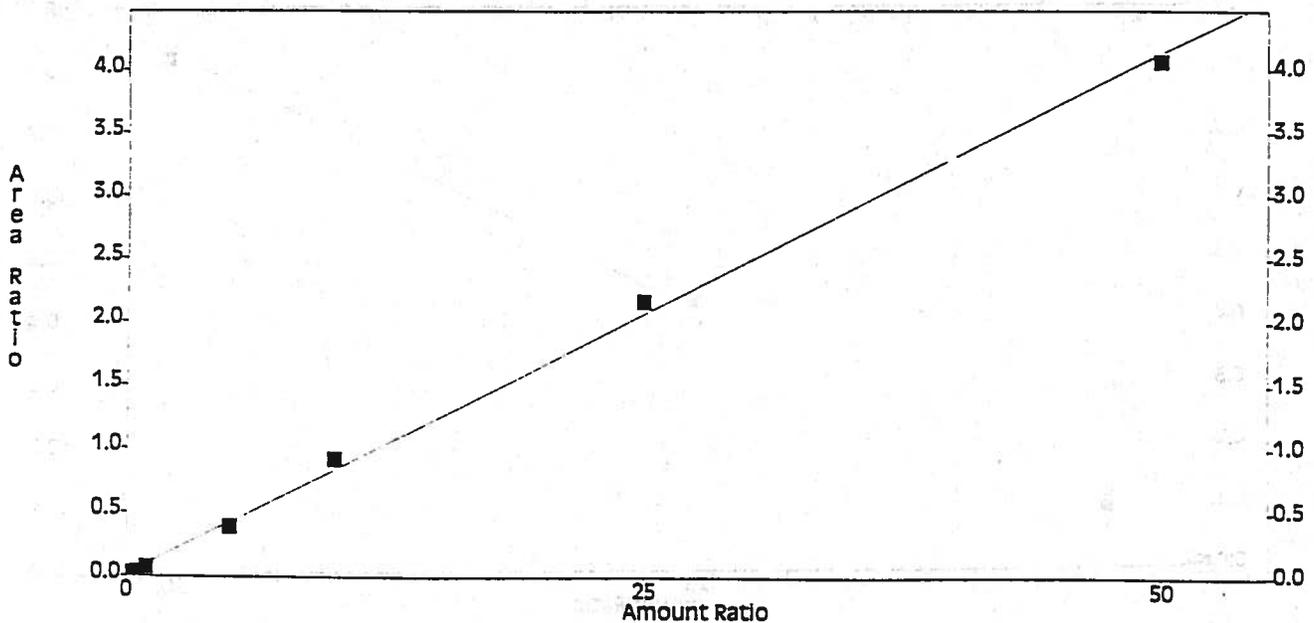
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 12.1363 x Area - 0.195507
R² = 0.998226 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met * - Replicate Not Used
 Printed : Jun 04, 1996 17:07:09
 Channel : B
 Peak : BROMOFORM

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
2	0.0006	0.5	0.001164	0.0006							0
3	0.0035	1	0.003479	0.0035							0
4	0.0614	5	0.01228	0.0614							0
5	0.1733	10	0.01733	0.1733							0
6	0.4565	25	0.01826	0.4565							0
7	0.9486	50	0.01897	0.9486							0

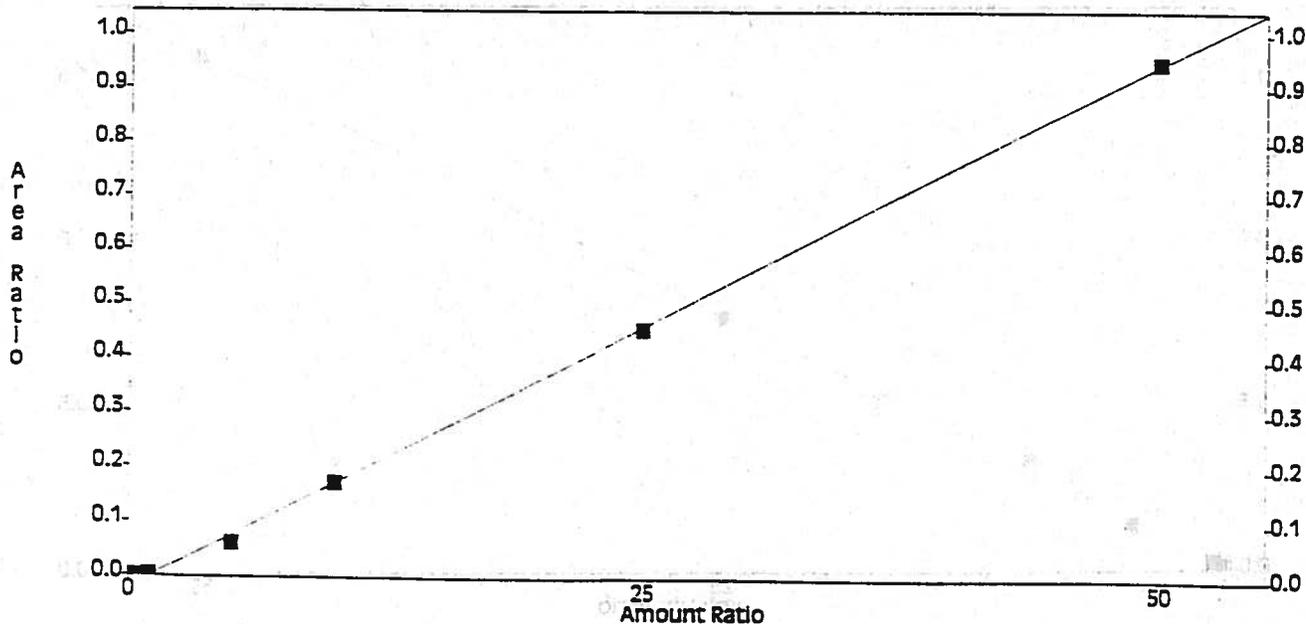
Calib Flag: Replace

Average RF: 0.0119137
 RF StdDev: 0.00782612
 RF %RSD: 65.6901

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 51.7862 x Area + 1.06229
 R² = 0.999403

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met * - Replicate Not Used

Printed : Jun 04, 1996 17:07:10

Channel : B

Peak : 1,1,2,2-PCA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0079	0.4	0.01963	0.0079							0
2	0.0124	0.5	0.02477	0.0124							0
3	0.0248	1	0.02479	0.0248							0
4	0.1410	5	0.02821	0.1410							0
5	0.3425	10	0.03425	0.3425							0
6	0.7739	25	0.03096	0.7739							0
7	1.5714	50	0.03143	1.5714							0

Calib Flag: Replace

Average RF: 0.0277186

RF StdDev: 0.00499795

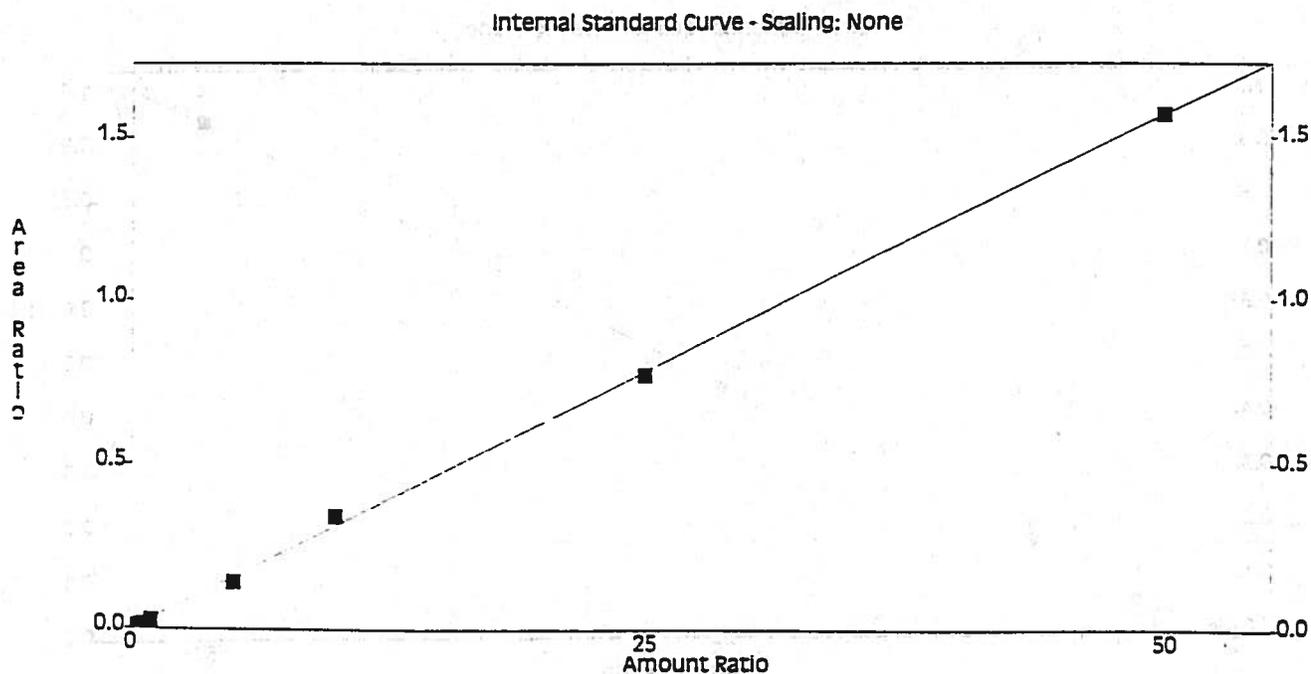
RF %RSD: 18.031

RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 31.7564 x Area + 0.0906511
R² = 0.999388



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:10

Channel : B

Peak : 1,2,3-TCPA

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0061	0.4	0.01517	0.0061							0
2	0.0082	0.5	0.01645	0.0082							0
3	0.0178	1	0.01783	0.0178							0
4	0.1021	5	0.02041	0.1021							0
5	0.2631	10	0.02631	0.2631							0
6	0.5776	25	0.0231	0.5776							0
7	1.1849	50	0.0237	1.1849							0

Calib Flag: Replace

Average RF: 0.0204258

RF StdDev: 0.00413595

RF %RSD: 20.2487

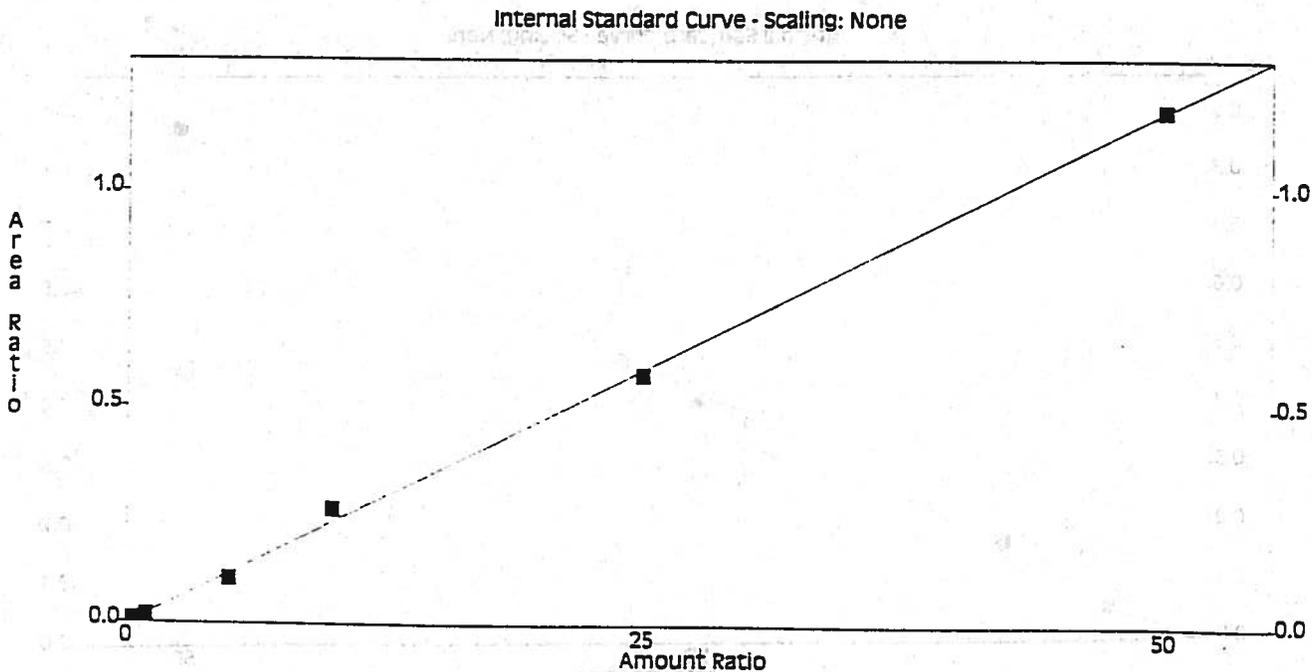
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 42.1242 x Area + 0.131706

R² = 0.998969



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:10

Channel : B

Peak : BROMOBENZENE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
2	0.0010	0.5	0.001966	0.0010							0
3	0.0040	1	0.004043	0.0040							0
4	0.0584	5	0.01168	0.0584							0
5	0.1686	10	0.01686	0.1686							0
6	0.4130	25	0.01652	0.4130							0
7	0.8787	50	0.01757	0.8787							0

Calib Flag: Replace

Average RF: 0.0114399

RF StdDev: 0.00688908

RF %RSD: 60.2197

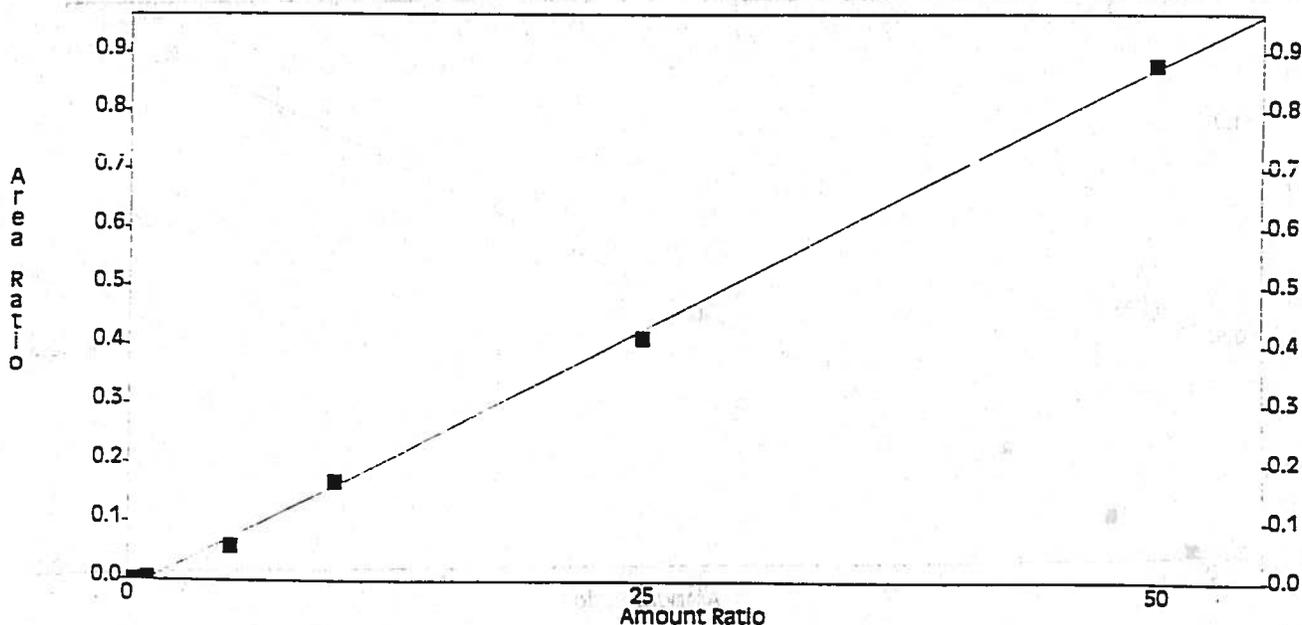
RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 56.1729 x Area + 0.98525
R² = 0.998993 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:11

Channel : B

Peak : 2-CL TOLUENE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0042	0.4	0.01052	0.0042							0
2	0.0078	0.5	0.01561	0.0078							0
3	0.0161	1	0.01608	0.0161							0
4	0.0912	5	0.01824	0.0912							0
5	0.2167	10	0.02167	0.2167							0
6	0.4889	25	0.01956	0.4889							0
7	1.1014	50	0.02203	1.1014							0

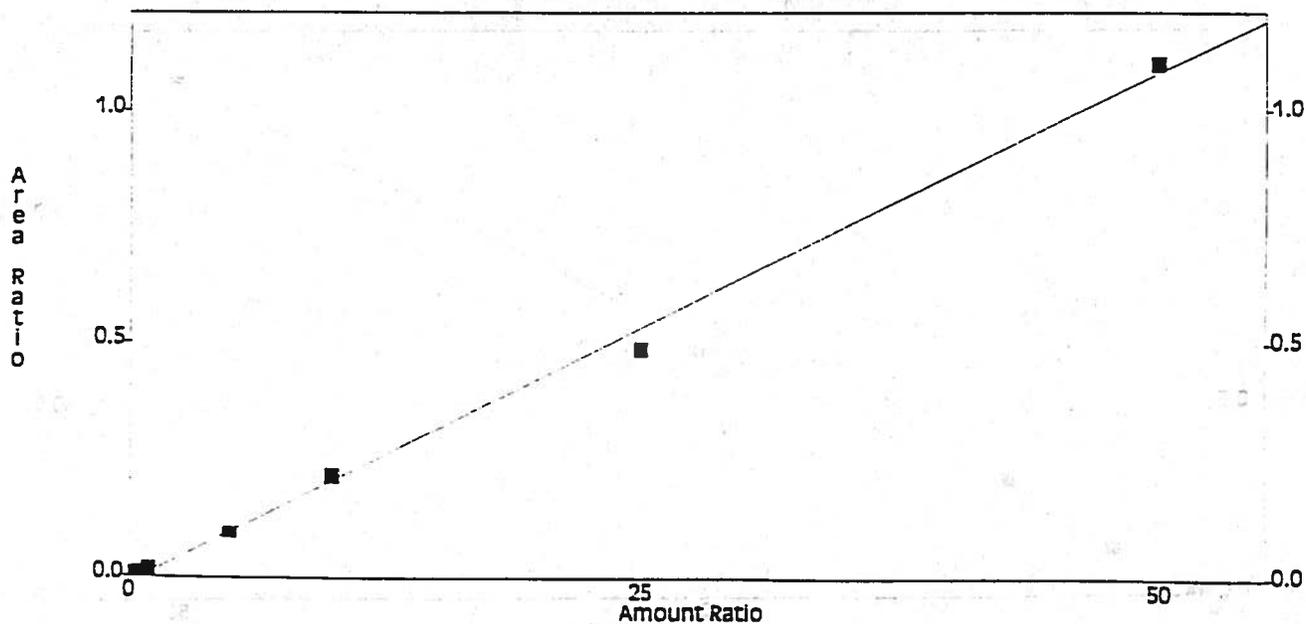
Calib Flag: Replace

Average RF: 0.0176746
RF StdDev: 0.00401436
RF %RSD: 22.7126

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 45.6704 x Area + 0.560516
R² = 0.997135 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:07:11
 Channel : B
 Peak : 4-CL TOLUENE

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0052	0.4	0.01302	0.0052							0
2	0.0091	0.5	0.01825	0.0091							0
3	0.0199	1	0.01987	0.0199							0
4	0.1253	5	0.02505	0.1253							0
5	0.3082	10	0.03082	0.3082							0
6	0.6489	25	0.02596	0.6489							0
7	1.3513	50	0.02703	1.3513							0

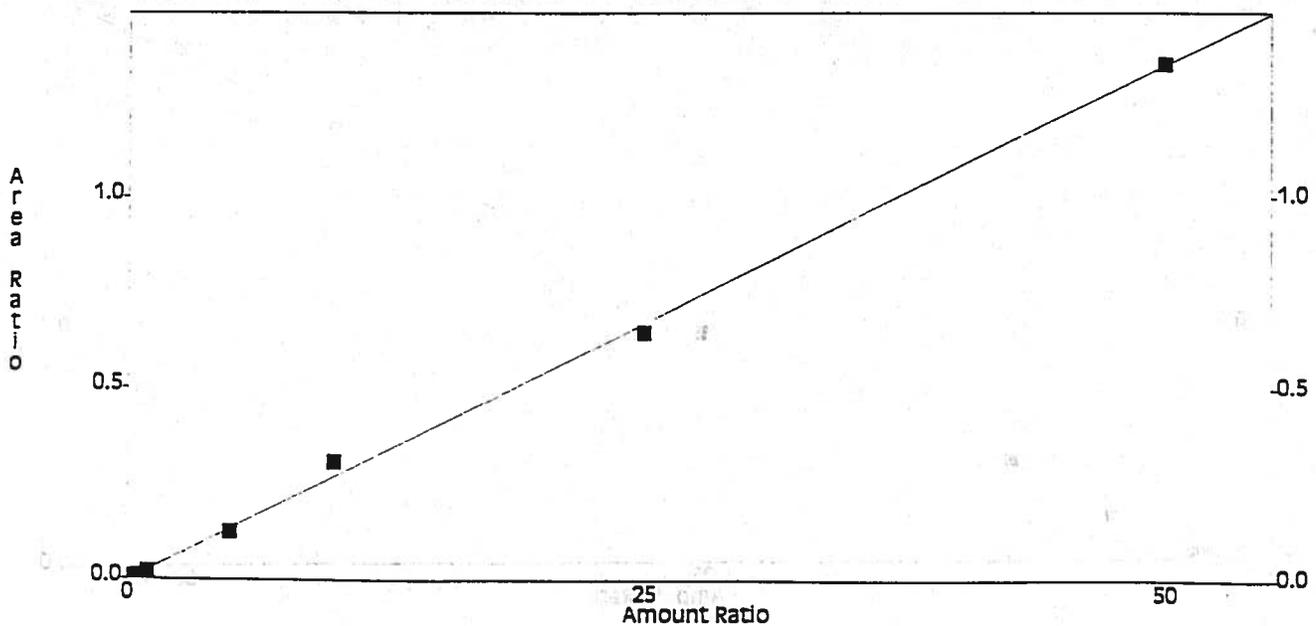
Calib Flag: Replace

Average RF: 0.0228572
 RF StdDev: 0.00608508
 RF %RSD: 26.6221

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 37.0394 x Area + 0.0700603
 $R^2 = 0.998448$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:11

Channel : B

Peak : 1,3-DCB

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0085	0.4	0.02127	0.0085							0
2	0.0114	0.5	0.02286	0.0114							0
3	0.0282	1	0.02825	0.0282							0
4	0.1720	5	0.0344	0.1720							0
5	0.4205	10	0.04205	0.4205							0
6	0.8888	25	0.03555	0.8888							0
7	1.9131	50	0.03826	1.9131							0

Calib Flag: Replace

Average RF: 0.0318075

RF StdDev: 0.00786373

RF %RSD: 24.7228

RF Definition: Area / Amount

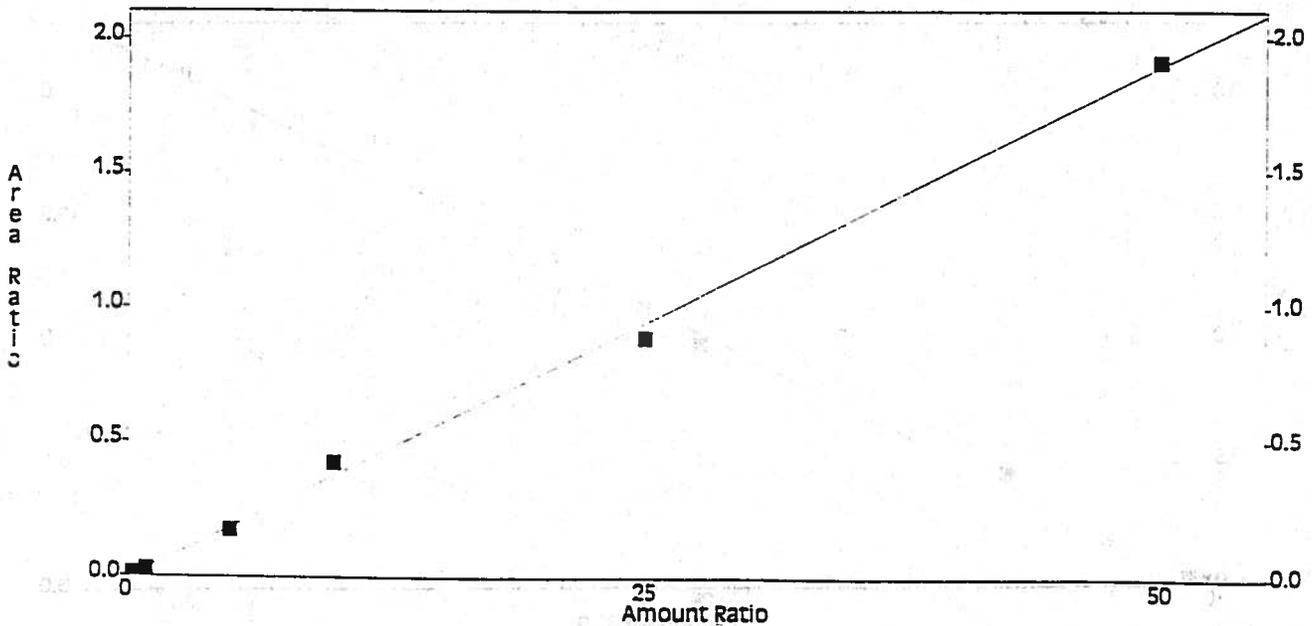
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 26.2397 x Area + 0.223825

R² = 0.998067 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:12

Channel : B

Peak : 1,4-DCB

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0091	0.4	0.02285	0.0091							0
2	0.0130	0.5	0.02605	0.0130							0
3	0.0321	1	0.03212	0.0321							0
4	0.1902	5	0.03804	0.1902							0
5	0.4598	10	0.04598	0.4598							0
6	0.9850	25	0.0394	0.9850							0
7	2.0868	50	0.04174	2.0868							0

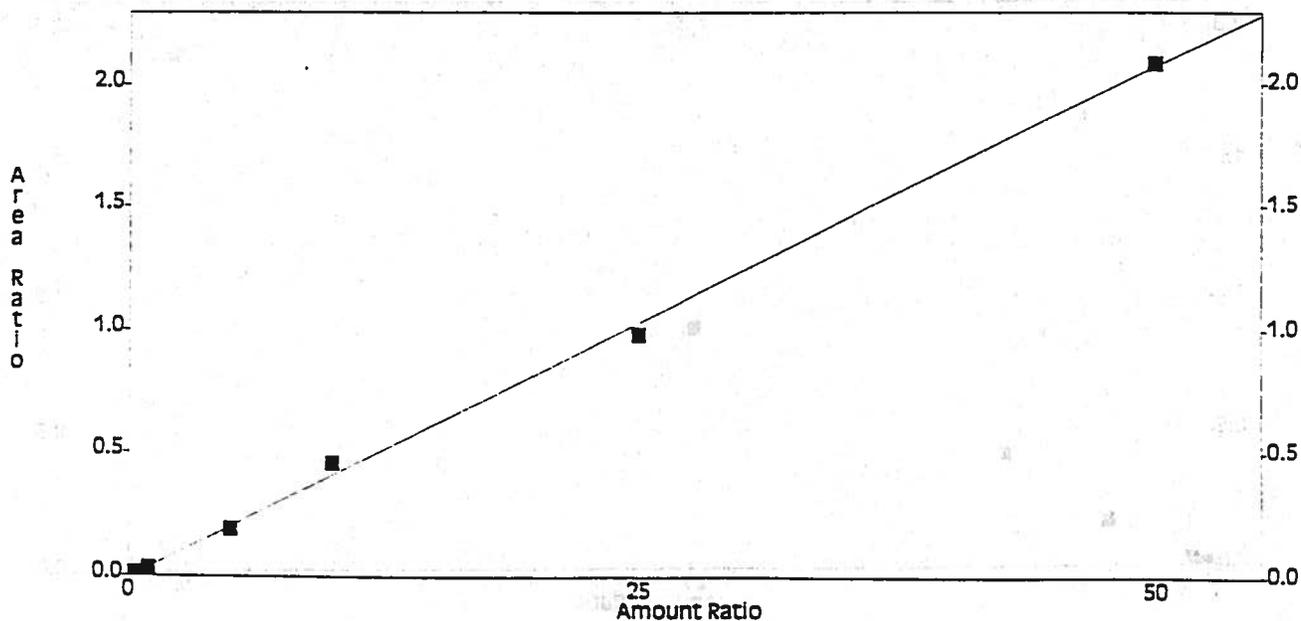
Calib Flag: Replace

Average RF: 0.0351674
RF StdDev: 0.00846827
RF %RSD: 24.0799

RF Definition: Area / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 24.028 x Area + 0.167247
 $R^2 = 0.998531$ ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:12

Channel : B

Peak : 1,2-DCB

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0113	0.4	0.02824	0.0113							0
2	0.0134	0.5	0.02675	0.0134							0
3	0.0299	1	0.02989	0.0299							0
4	0.1620	5	0.03239	0.1620							0
5	0.3939	10	0.03939	0.3939							0
6	0.8622	25	0.03449	0.8622							0
7	1.8630	50	0.03726	1.8630							0

Calib Flag: Replace

Average RF: 0.0326297

RF StdDev: 0.00469173

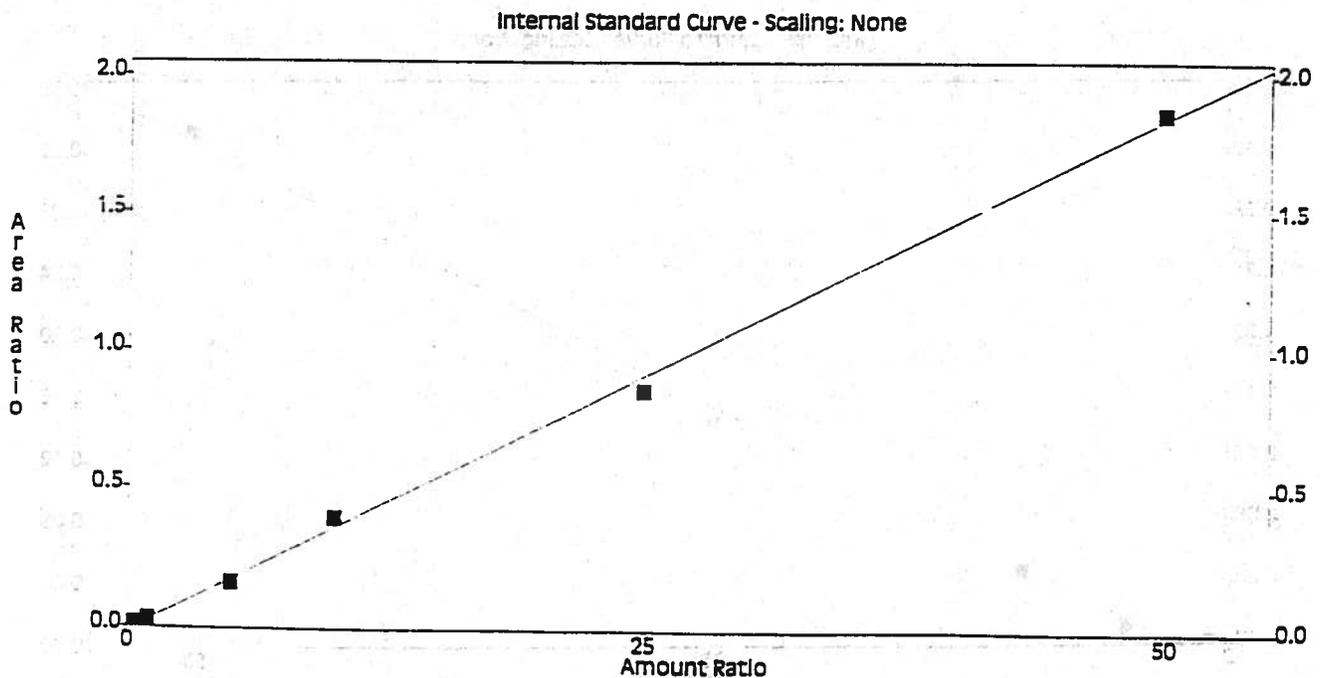
RF %RSD: 14.3787

RF Definition: Area / Amount

Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 26.9663 x Area + 0.278545
 R² = 0.998321 ✓



Method : c:\ezchrom\chrom\3voa0603.met
 Printed : Jun 04, 1996 17:07:12
 Channel : B
 Peak : 1,2-DBr-3-CPA

* - Replicate Not Used

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
3	0.0011	1	0.001073	0.0011							0
4	0.0132	5	0.002642	0.0132							0
5	0.0486	10	0.004856	0.0486							0
6	0.1436	25	0.005742	0.1436							0
7	0.3341	50	0.006683	0.3341							0

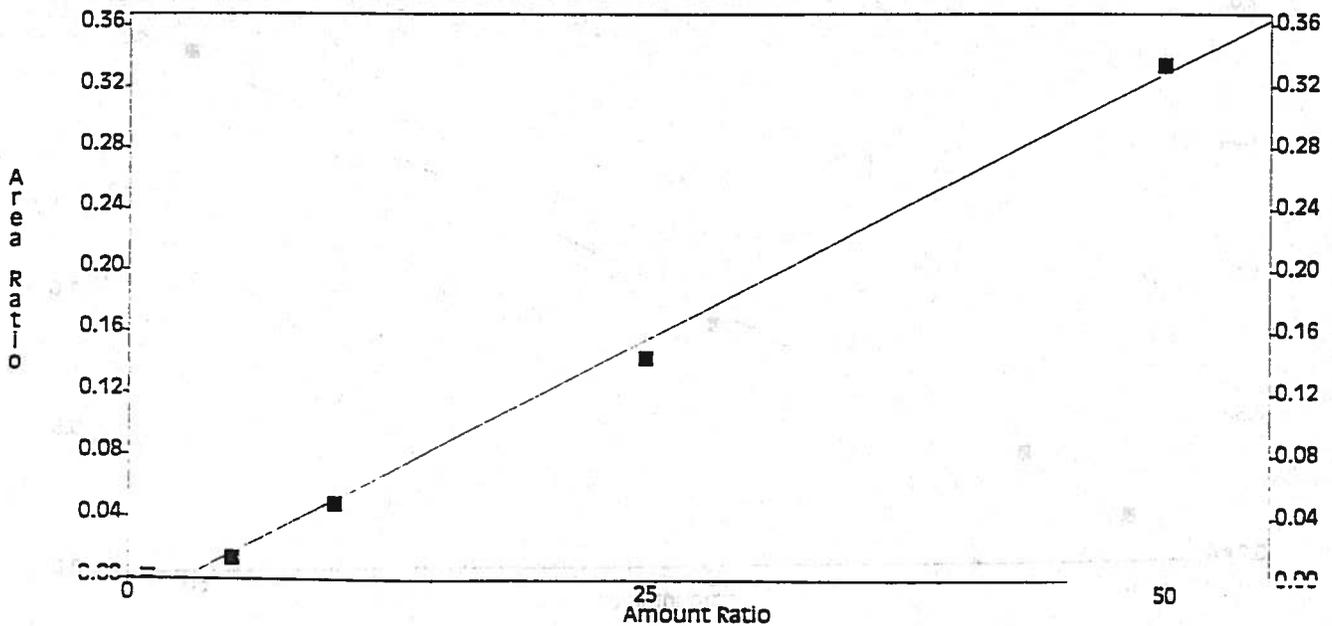
Calib Flag: Replace

Average RF: 0.00419919
 RF StdDev: 0.00230114
 RF %RSD: 54.7995

RF Definition: Area / Amount
 Weighting Method: None
 Fit Through Zero: No

Linear Fit: Amount = 144.206 x Area + 2.61021
 $R^2 = 0.995621$

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:13

Channel : B

Peak : 1,2,4-TCB

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0079	0.4	0.01986	0.0079							0
2	0.0120	0.5	0.02398	0.0120							0
3	0.0298	1	0.02985	0.0298							0
4	0.1805	5	0.0361	0.1805							0
5	0.3870	10	0.0387	0.3870							0
6	0.9363	25	0.03745	0.9363							0
7	1.8685	50	0.03737	1.8685							0

Calib Flag: Replace

Average RF: 0.0319021

StdDev: 0.00748972

RF %RSD: 23.4772

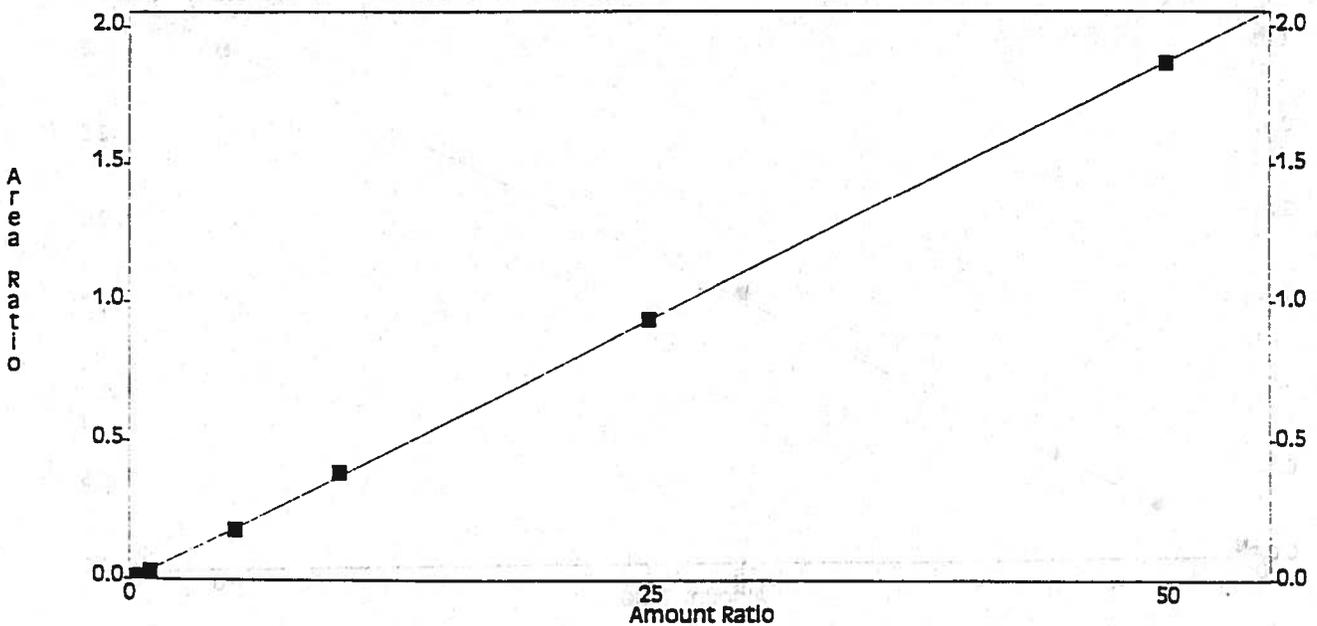
Definition: Area / Amount

Lighting Method: None

Plot Through Zero: No

Linear Fit: Amount = 26.6524 x Area + 0.0989264
R² = 0.999893 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:13

Channel : B

Peak : HEXACL BUTADIENE

Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0207	0.4	0.05164	0.0207							0
2	0.0278	0.5	0.05562	0.0278							0
3	0.0689	1	0.06886	0.0689							0
4	0.3192	5	0.06384	0.3192							0
5	0.6154	10	0.06154	0.6154							0
6	1.5598	25	0.06239	1.5598							0
7	3.0030	50	0.06006	3.0030							0

Calib Flag: Replace

Average RF: 0.060564

RF StdDev: 0.00560073

RF %RSD: 9.24763

RF Definition: Area / Amount

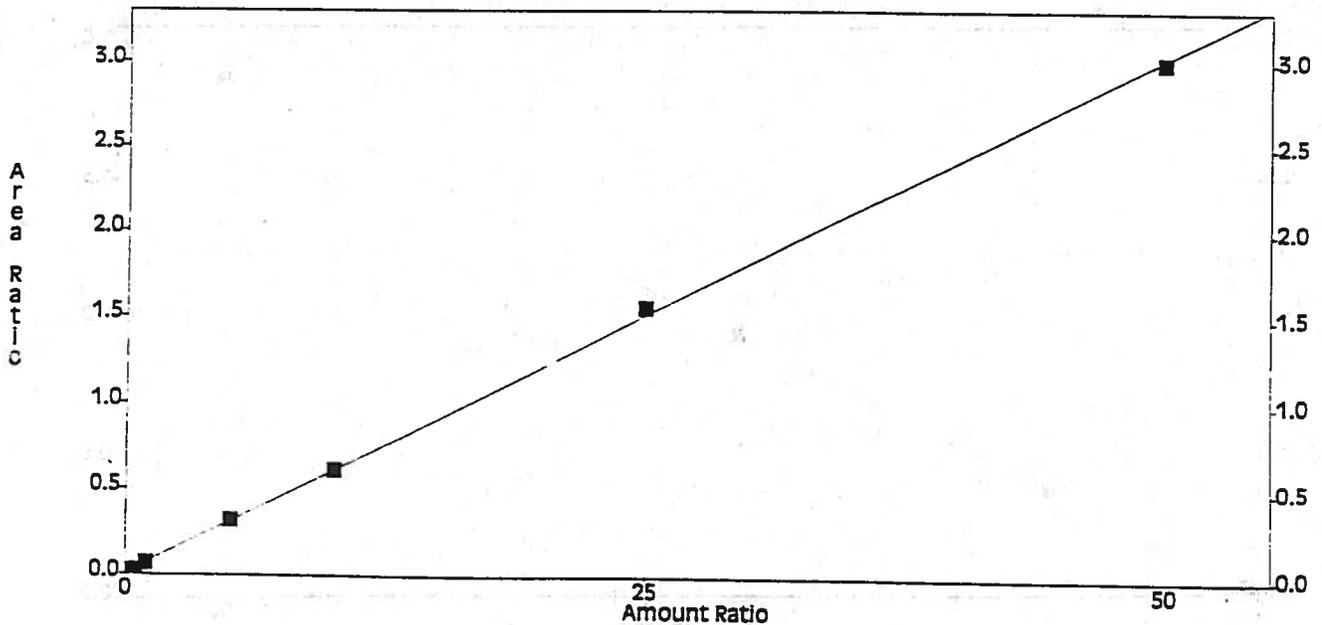
Weighting Method: None

Fit Through Zero: No

Linear Fit: Amount = 16.5822 x Area - 0.172173

R² = 0.99964 ✓

Internal Standard Curve - Scaling: None



Method : c:\ezchrom\chrom\3voa0603.met

* - Replicate Not Used

Printed : Jun 04, 1996 17:07:13

Channel : B

Peak : 1,2,3-TCB

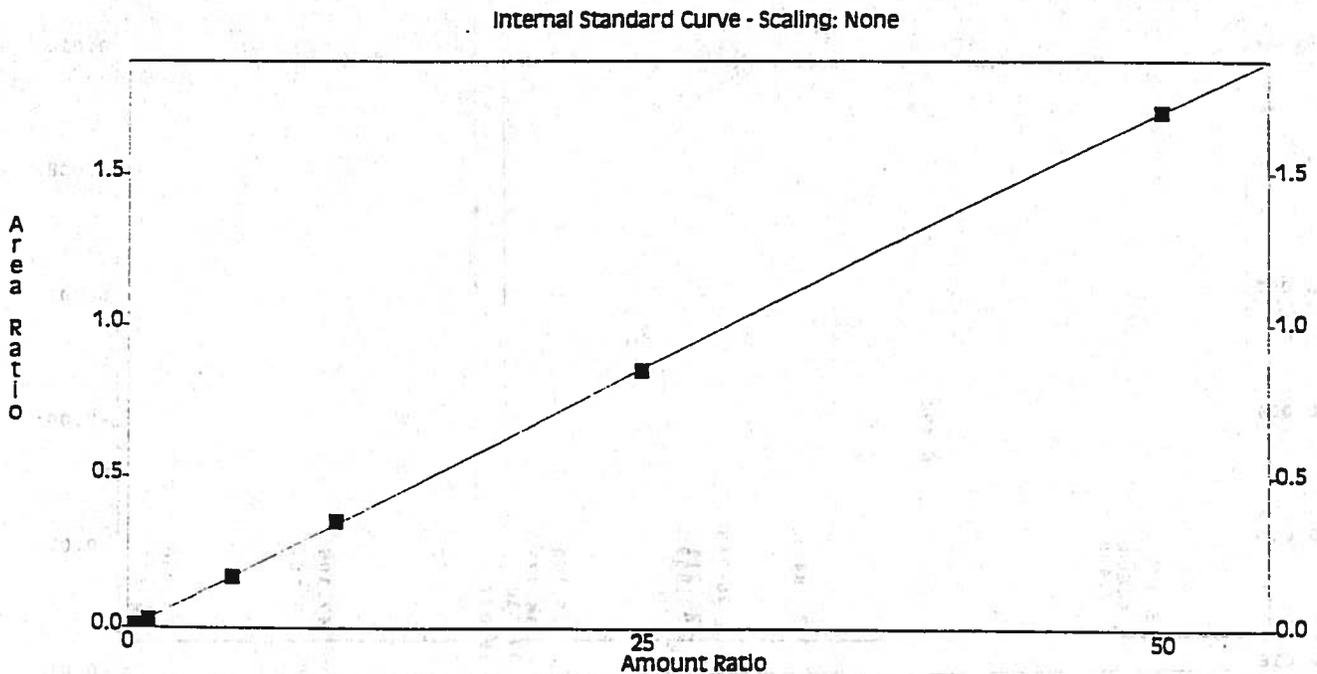
Level	Area Ratio	Amount Ratio	RF	Rep Area 1 Ratio	Rep Area 2 Ratio	Rep Area 3 Ratio	Rep Area 4 Ratio	Rep Area 5 Ratio	Replic STD	Replic %RSD	Old Area Ratio
1	0.0078	0.4	0.01958	0.0078							0
2	0.0102	0.5	0.02036	0.0102							0
3	0.0273	1	0.02734	0.0273							0
4	0.1688	5	0.03376	0.1688							0
5	0.3519	10	0.03519	0.3519							0
6	0.8514	25	0.03406	0.8514							0
7	1.7076	50	0.03415	1.7076							0

Calib Flag: Replace

average RF: 0.0292061
 F StdDev: 0.00681799
 RF %RSD: 23.3444

F Definition: Area / Amount
 ighting Method: None
 it Through Zero: No

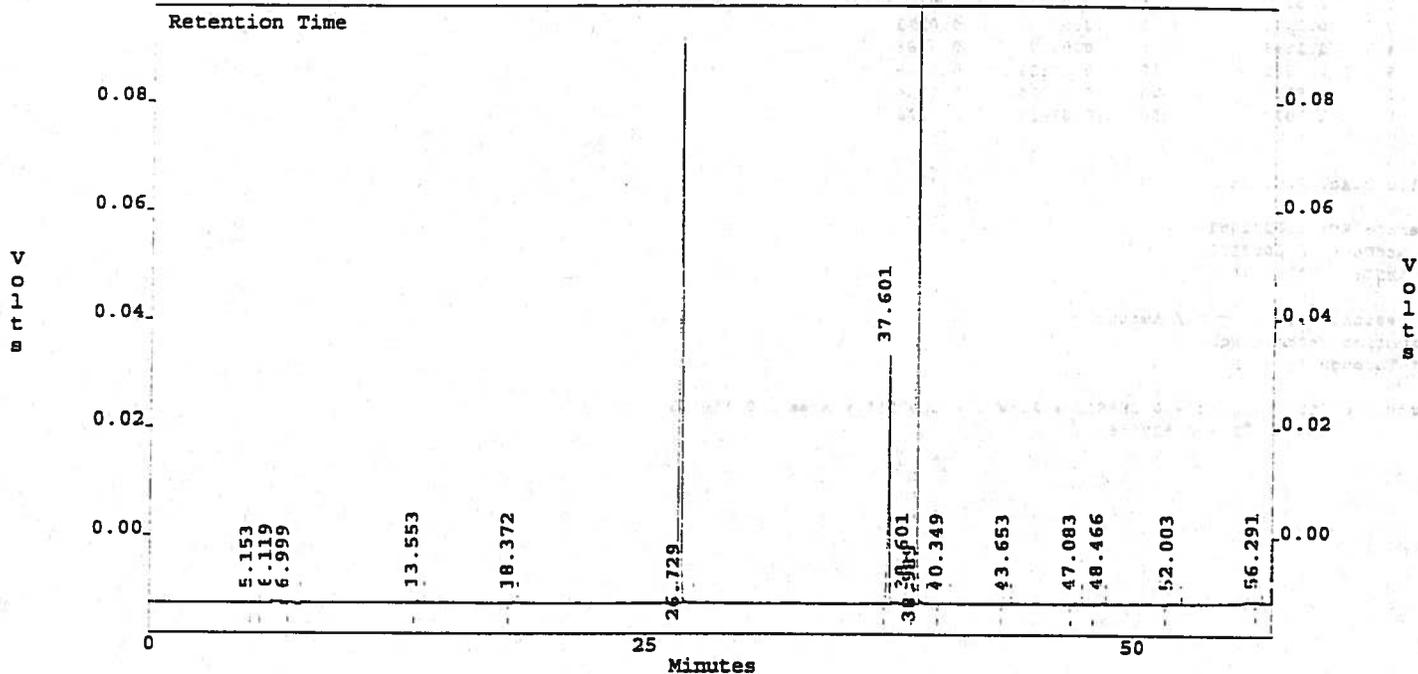
Quadratic Fit: Amount = 0.289813 x Area² + 28.7185 x Area + 0.150583
 R² = 0.999936



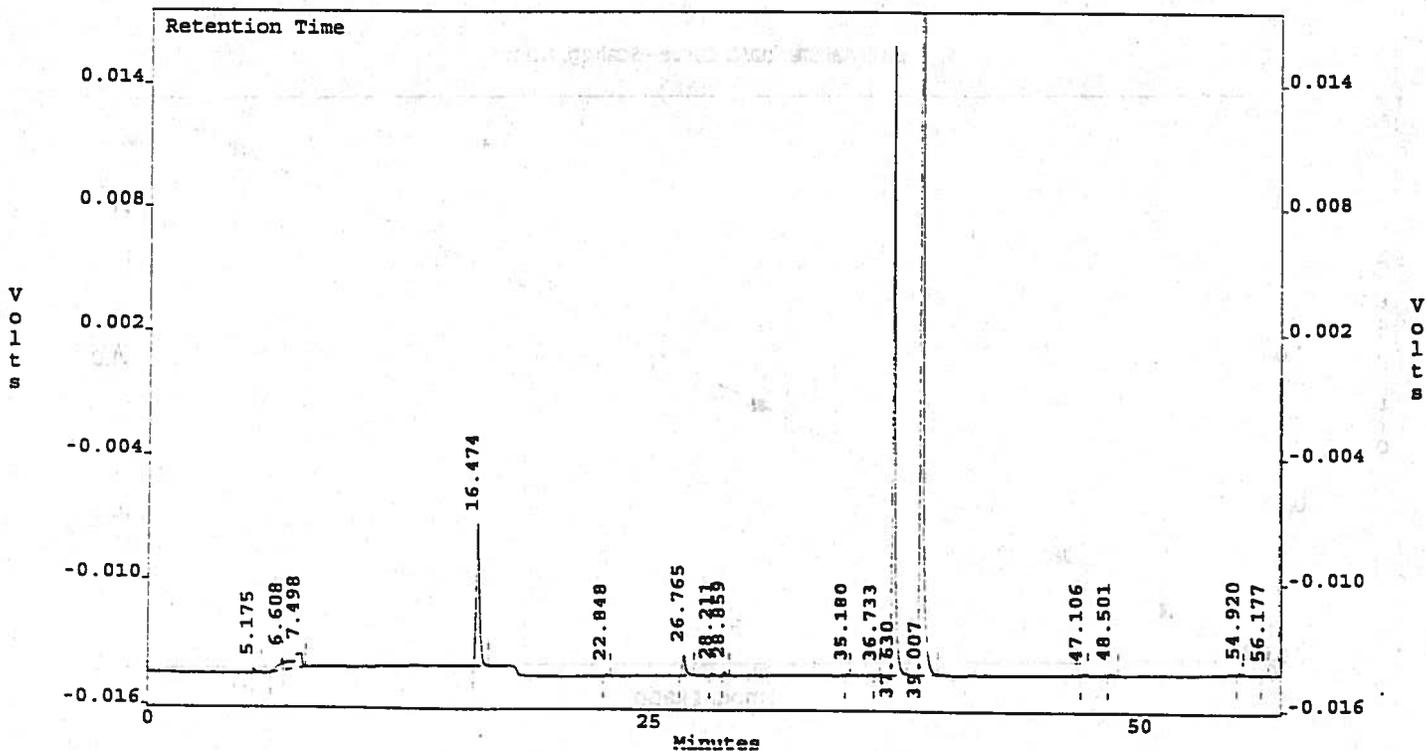
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.13
Method : c:\ezchrom\chrom\3voa0603.met
Sample ID : MTHD BLKw 13
Acquired : Jun 04, 1996 07:40:21
Printed : Jun 04, 1996 17:29:43

c:\ezchrom\chrom\360603.13 -- Channel A



c:\ezchrom\chrom\360603.13 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.13
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : MTHD BLKw 13
 Acquired : Jun 04, 1996 07:40:21
 Printed : Jun 04, 1996 17:29:46

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil($\mu\text{g}/\text{kg}$)	Soln($\mu\text{g}/\text{L}$)	Compound
5.15	1760	0.0	0	0.00	
6.12	23775	0.0	0	0.00	
7.00	8250	0.0	0	0.00	
13.55	4704	0.0	0	0.00	
18.37	1826	0.0	0	0.00	
26.73	799934	5.0	100	1.00	Flbenzene (IS) <i>ok</i>
37.60	264072	462.0	9239	92.39	1cl4fbz (surr) <i>a 2</i>
38.60	1781	0.0	0	0.00	M/P Xylene
38.99	740766 ✓	5.0	100	1.00	1cl2flbz (IS) <i>ok</i>
40.35	1831	4.2	85	0.85 <i>nm</i>	Styrene
43.65	1903	7.9	159	1.59 <i>u</i>	1,3,5-tmb/2-cl tol
47.08	2322	3.0	60	0.60 <i>u</i>	1,4-dcb
48.47	2258	2.4	48	0.48 <i>nm</i>	1,2-dcb
52.00	2923	0.0	0	0.00	
56.29	1586	0.4	8	0.08 <i>nm</i>	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.13
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : MTHD BLKw 13
 Acquired : Jun 04, 1996 07:40:21
 Printed : Jun 04, 1996 17:29:46

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.18	2199	0.0	0	0.00	
6.61	7507	0.0	0	0.00	
7.50	27425	0.0	0	0.00	
16.47	77142	0.0	0	0.00	METH CHLORIDE
22.85	1043	0.0	0	0.00	CHLOROFORM
26.77	11938	0.0	0	0.00	
28.21	1235	0.0	0	0.00	TCE
28.86	1705	0.0	0	0.00	1,2-DCPA
35.18	588	0.0	0	0.00	PCE
35.73	446	3.3	77	0.77 <i>nm</i>	1,2 DDBA (EDB)
37.63	231453	531.6	10633	106.33	1CL4FBZ (SURR) 106
39.01	473607 ✓	5.0	100	1.00	1CL2FBZ (IS) 06
47.11	923	1.1	21	0.21 <i>cmal</i>	1,4-DCB
48.50	1627	1.9	37	0.37 ↓	1,2-DCB
54.92	1049	0.0	0	0.00	HEXA CL BUTADIENE
56.18	734	1.0	20	0.20 <i>cmal</i>	1,2,3-TCB

*nm - not required for days
analysis*

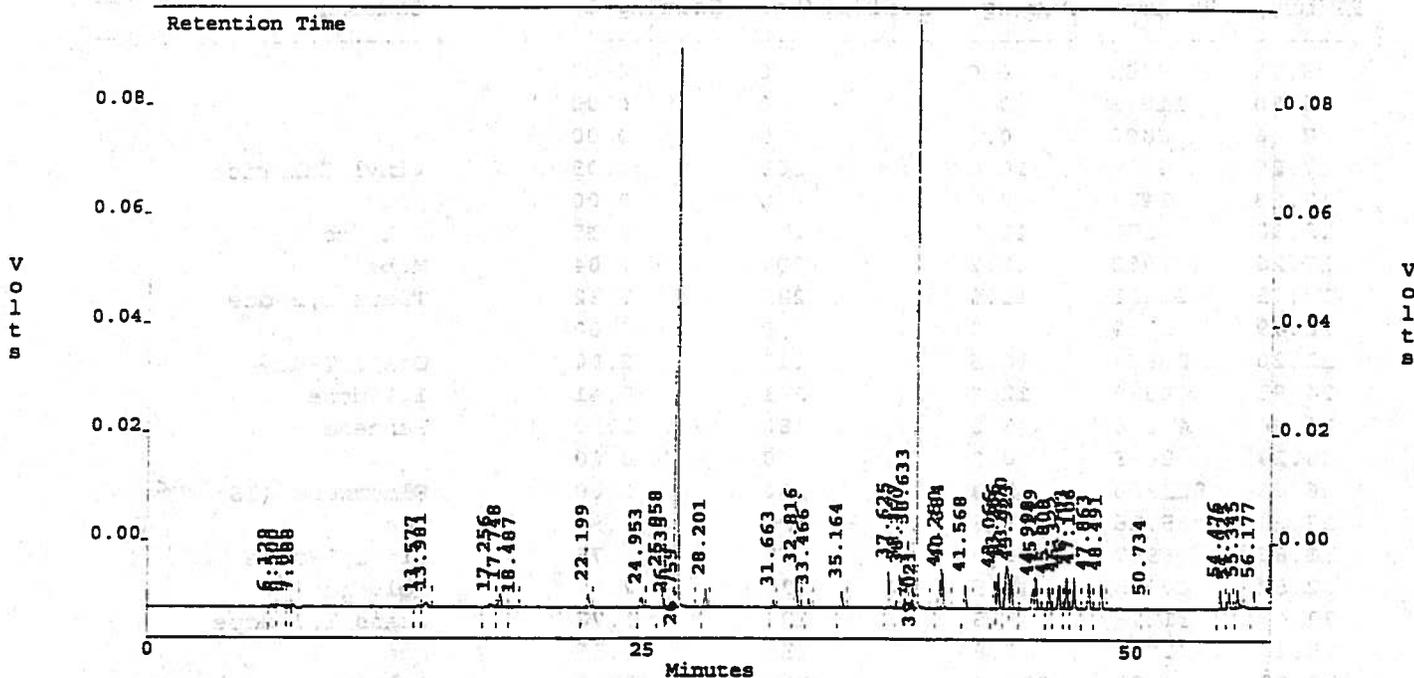
05 JUN 96 U

1605 JUN 96

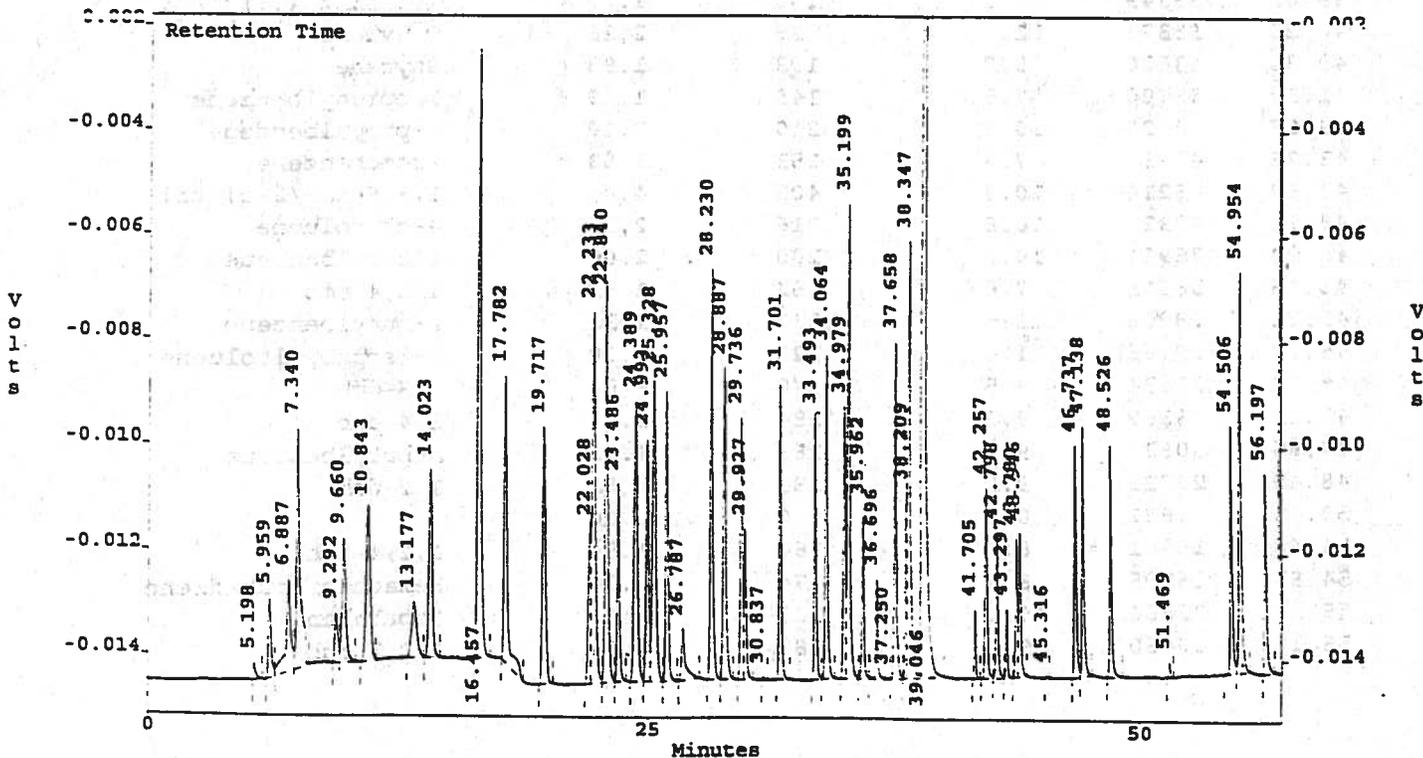
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.14
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 2.0 ppb 14
 Acquired : Jun 04, 1996 08:57:02
 Printed : Jun 05, 1996 10:53:49

c:\ezchrom\chrom\360603.14 -- Channel A



c:\ezchrom\chrom\360603.14 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.14
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 2.0 ppb 14
 Acquired : Jun 04, 1996 08:57:02
 Printed : Jun 05, 1996 10:53:52

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.13	9263	0.0	0	0.00	
6.50	11058	0.0	0	0.00	
7.06	6800	0.0	0	0.00	
7.29	6932	10.4	209	2.09	Vinyl Chloride
13.58	3473	0.0	0	0.00	
15.96	3370	10.0	215	2.15	1,1 dce
17.26	7982	10.2	204	2.04	Mtbe
17.75	21821	11.6	232	2.32	Trans 1,2-dce
18.49	1729	0.0	0	0.00	
22.20	20874	10.5	210	2.10	Cis 1,2-dce
24.95	15859	12.0	241	2.41	1,1-dcpe
25.96	44246	9.0	180	1.80	Benzene
26.23	2699	0.0	0	0.00	
26.76	802300	5.0	100	1.00	Flbenzene (IS) <i>OK</i>
28.20	25716	9.6	191	1.91	Tce
31.66	8907	8.7	175	1.75	Cis 1,3-dcpe
32.82	40995	11.5	230	2.30	Toluene
33.47	11276	8.8	177	1.77	Trans 1,3-dcpe
35.16	21081	7.8	156	1.56	Pce
37.62	42608	110.0	2201	22.01	1cl4fbz (surr) <i>110</i> ✓
38.18	42182	9.1	182	1.82	Chlorobenzene
38.35	39004	9.4	189	1.89	Ethylbenzene
38.63	86490 ✓	13.6	272	2.72	M/P Xylene
39.02	739349 ✓	5.0	100	1.00	1cl2flbz (IS) <i>OK</i>
40.25	35372	11.4	228	2.28	O Xylene
40.38	43020	9.7	193	1.93	Styrene
41.57	31700	7.5	149	1.49 *	Isopropylbenzene
43.07	33726	10.5	210	2.10	n-propylbenzene
43.26	42333	7.6	153	1.53 *	Bromobenzene
43.67	86214	20.3	405	4.05	1,3,5-tmb/2-cl tol
43.92	40321	10.8	216	2.16	4-cl toluene
45.00	26911	10.0	200	2.00	t-butylbenzene
45.15	38625	7.6	152	1.52 *	1,2,4-tmb
45.81	28958	11.6	232	2.32	s-butylbenzene
46.32	29765	11.4	228	2.28	p-isopropyltoluene
46.70	35434	8.5	170	1.70	1,3-dcb
47.11	36169	9.2	184	1.84	1,4-dcb
47.86	30831	9.1	183	1.83	n-butylbenzene
48.49	29721	9.0	181	1.81	1,2-dcb
50.73	1881	0.0	0	0.00	
54.48	18981	8.2	164	1.64	1,2,4-tcb
54.93	18295	8.7	174	1.74	Hexachlorobutadiene
55.34	22860	10.1	203	2.03	Napthalene
56.18	20460	9.1	183	1.83	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.14
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 2.0 ppb 14
 Acquired : Jun 04, 1996 08:57:02
 Printed : Jun 05, 1996 10:53:52

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.20	2872	0.0	0	0.00	
5.96	14819	6.6	131	1.31 *	DCDFM
6.89	28276	6.8	135	1.35 *	CHLOROMETHANE
7.34	57030	9.8	197	1.97	VINYL CHLORIDE
9.29	10102	7.8	157	1.57	BROMOMETHANE
9.66	30823	5.9	118	1.18 *	CHLOROETHANE
10.84	44906	7.4	147	1.47 *	TCFM
13.18	20131	6.0	121	1.21 *	FREON 113
14.02	42306	8.0	160	1.60	1,1-DCE
16.46	129870	0.0	0	0.00	METH CHLORIDE
17.78	60242	8.5	171	1.71	TRANS 1,2-DCE
19.72	55877	8.8	175	1.75	1,1-DCA
22.03	25915	9.5	190	1.90	2,2-DCPA
22.23	79198	8.0	161	1.61	CIS 1,2-DCE
22.84	79026	8.4	167	1.67	CHLOROFORM
23.49	31387	7.8	157	1.57	BCM
24.39	63551	8.5	170	1.70	1,1,1-TCA
24.99	42883	9.2	183	1.83	1,1-DCPE
25.33	53533	3.2	164	1.64	CARBON TET
25.96	47251	8.6	173	1.73	1,2-DCA
26.79	14263	22.6	451	4.51 *	2-CL ETH VI ETH
28.23	65629	7.9	158	1.58	TCE
28.89	54700	8.7	175	1.75	1,2-DCPA
29.74	39344	9.7	193	1.93	BRDICLMETHANE
29.93	21258	8.4	167	1.67	DIBROMOMETHANE
30.84	478	0.0	0	0.00	
31.70	41913	8.6	172	1.72	CIS 1,3-DCPE
33.49	35072	9.2	183	1.83	TRANS 1,3-DCPE
34.06	48680	10.4	208	2.08	1,1,2-TCA
34.98	34436	10.1	201	2.01	1,3-DCPA
35.20	78509	9.3	187	1.87	PCE
35.96	23141	8.6	171	1.71	DIBRCLMETHANE
36.70	13501	10.0	199	1.99	1,2-DBEA (EDB)
37.25	501	0.0	0	0.00	
37.66	47428	97.1	1941	19.41	1CL4FBZ (SURR) 97 ✓
38.21	17452	9.0	179	1.79	CHLOROBENZENE
38.35	83068	8.9	179	1.79	1,1,1,2-PCA
39.05	508780 ✓	5.0	100	1.00	1CL2FBZ (IS) 0.1
41.70	7597	9.2	184	1.84	BROMOFORM
42.26	27608	9.1	181	1.81	1,1,2,2-PCA
42.80	19953	8.9	178	1.78	1,2,3-TCPA
43.30	7716	9.2	184	1.84	BROMOBENZENE
43.78	17350	10.6	212	2.12	2-CL TOLUENE
43.95	20381	7.8	155	1.55	4-CL TOLUENE
45.32	366	0.0	0	0.00	

Continued...

File : c:\ezchrom\chrom\360603.14
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 2.0 ppb 14
 Acquired : Jun 04, 1996 08:57:02
 Printed : Jun 05, 1996 10:53:52

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
46.74	31802	9.3	186	1.86	1,3-DCB
47.14	33418	8.7	175	1.75	1,4-DCB
48.53	31354	9.7	194	1.94	1,2-DCB
51.47	1874	15.7	314	3.14 \uparrow	1,2-DBr-3-CPA
54.51	30519	8.5	170	1.70	1,2,4-TCB
54.95	58888	8.7	175	1.75	HEXAChLBTADIENE
56.20	26360	8.2	164	1.64	1,2,3-TCB

**out of $\pm 20\%$ range*

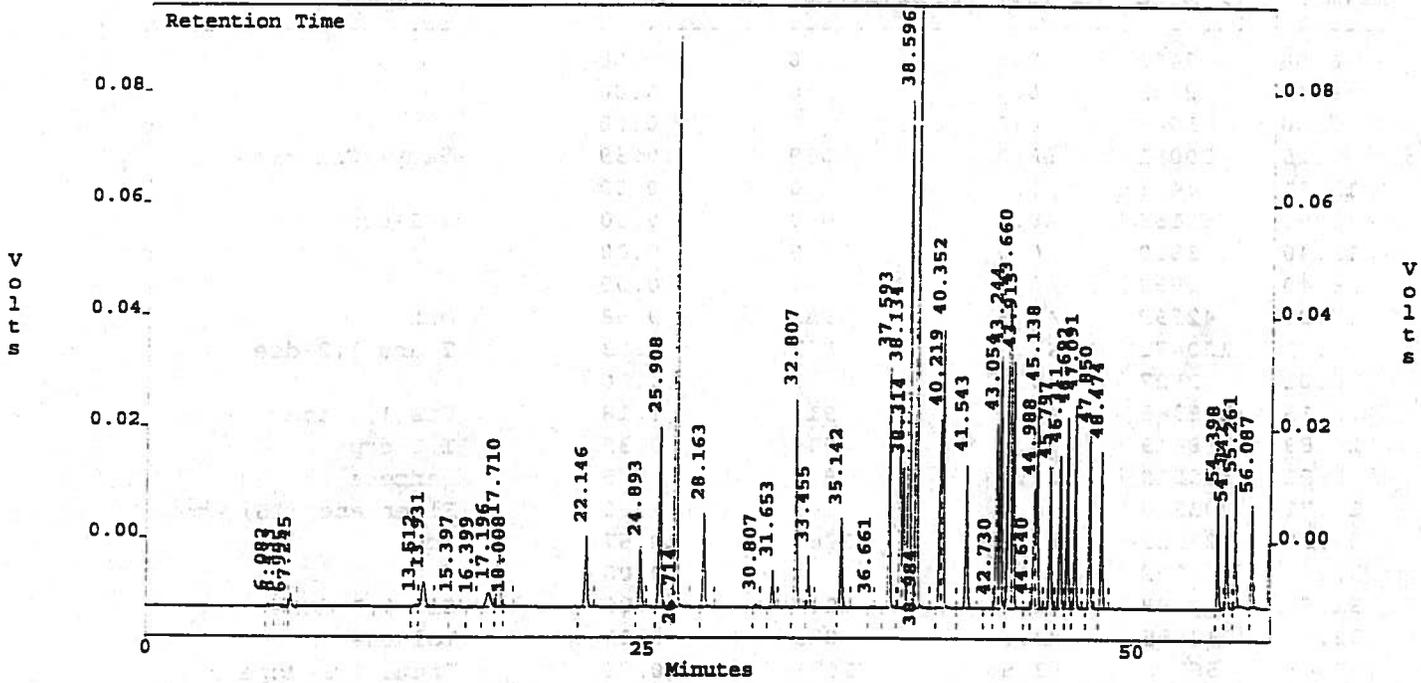
05 JUN 96 LT

AG05 JUN 96

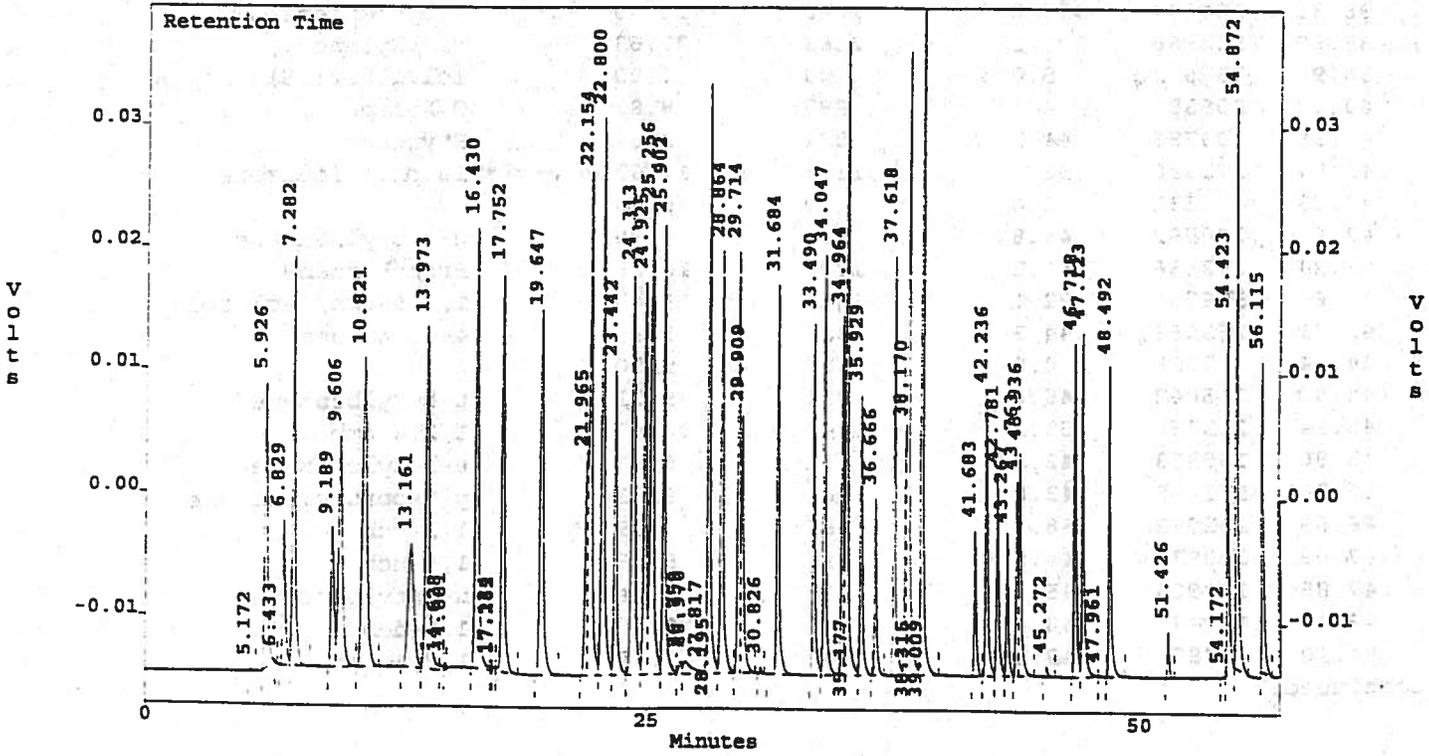
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.15
Method : c:\ezchrom\chrom\3voa0603.met
Sample ID : CHK VOA 15
Acquired : Jun 04, 1996 10:10:02
Printed : Jun 05, 1996 10:53:28

c:\ezchrom\chrom\360603.15 -- Channel A



c:\ezchrom\chrom\360603.15 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.15
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CHK VOA 15
 Acquired : Jun 04, 1996 10:10:02
 Printed : Jun 05, 1996 10:53:30

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
6.08	7481	0.0	0	0.00	
6.43	8631	0.0	0	0.00	
7.00	3849	0.0	0	0.00	
7.25	20091	52.0	1039	10.39	Vinyl Chloride
13.51	4415	0.0	0	0.00	
13.93	55159	48.0	960	9.60	1,1-dce
15.40	3500	0.0	0	0.00	
16.40	1992	0.0	0	0.00	
17.20	42599	47.9	958	9.58	Mtbe
17.71	120471	43.7	873	8.73	Trans 1,2-dce
18.01	2527	0.0	0	0.00	
22.15	105365	45.9	918	9.18	Cis 1,2-dce
24.89	88619	46.9	939	9.39	1,1-dcpe
25.31	250010	48.8	975	9.75	Benzene
26.71	793340	5.0	100	1.00	Flbenzene (IS) ok
28.16	129921	53.4	1067	10.67	Tce
30.81	4702	0.0	0	0.00	
31.65	44499	50.0	1000	10.00	Cis 1,3-dcpe
32.81	247955	44.1	883	8.83	Toluene
33.45	56207	53.8	1076	10.76	Trans 1,3-dcpe
35.14	113032	58.3	1166	11.66 ok 404	Pce
36.66	1962	0.0	0	0.00	
37.59	252821	445.8	8916	89.16	1cl4fbz (surr) 8 9
38.13	232933	51.6	1032	10.32	Chlorobenzene
38.31	184444	52.0	1040	10.40	Ethylbenzene
38.60	583566	108.1	2163	21.63	M/P Xylene
38.98	737631 ✓	5.0	100	1.00	1cl2fibz (IS) ok
40.22	209307	44.4	887	8.87	O Xylene
40.35	303786	44.2	884	8.84	Styrene
41.54	171630	58.2	1163	11.63 ok 404	Isopropylbenzene
42.73	1531	0.0	0	0.00	
43.05	200592	44.8	895	8.95	n-propylbenzene
43.24	263666	51.2	1025	10.25	Bromobenzene
43.66	576798	92.1	1843	18.43	1,3,5-tmb/2-cl tol
43.91	253083	44.3	885	8.85	4-cl toluene
44.64	3018	0.0	0	0.00	
44.99	145042	46.0	921	9.21	t-butylbenzene
45.14	243355	52.1	1042	10.42	1,2,4-tmb
45.80	165353	42.6	851	8.51	s-butylbenzene
46.31	171498	43.0	861	8.61	p-isopropyltoluene
46.69	202092	48.5	969	9.69	1,3-dcb
47.09	200978	44.8	896	8.96	1,4-dcb
47.85	180904	45.7	914	9.14	n-butylbenzene
48.47	162476	48.0	960	9.60	1,2-dcb
54.40	108874	49.5	989	9.89	1,2,4-tcb

Continued...

File : c:\ezchrom\chrom\360603.15
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CHK VOA 15
 Acquired : Jun 04, 1996 10:10:02
 Printed : Jun 05, 1996 10:53:30

Channel A Results

RT (min)	Pk Area	Air (ng)	Soil (µg/kg)	Soln (µg/L)	Compound
54.84	102627	51.3	1026	10.26	Hexachlorobutadiene
55.26	108041	40.7	813	8.13 ^{ctc}	Napthalene
56.09	98469	49.3	986	9.86	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.15
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CHK VOA 15
 Acquired : Jun 04, 1996 10:10:02
 Printed : Jun 05, 1996 10:53:31

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.17	1520	0.0	0	0.00	
5.93	240684	58.6	1171	11.71 *	DCDFM
6.43	709	0.0	0	0.00	
6.83	106569	29.9	599	5.99 *	CHLOROMETHANE
7.28	294188	52.9	1059	10.59	VINYL CHLORIDE
9.19	127257	58.7	1173	11.73 o c c r c	BROMOMETHANE
9.61	272271	45.4	907	9.07	CHLOROETHANE
10.82	407692	52.9	1058	10.58	TCFM
13.16	206343	49.8	997	9.97	FREON 113
13.97	369151	53.7	1074	10.74	1,1-DCE
14.63	4014	0.0	0	0.00	
14.88	2657	0.0	0	0.00	
16.43	396928	0.0	0	0.00	METH CHLORIDE
17.13	1492	0.0	0	0.00	
17.26	3187	0.0	0	0.00	
17.75	329834	50.2	1005	10.05	TRANS 1,2-DCE
19.65	357416	54.8	1097	10.97	1,1-DCA
21.96	142451	43.8	876	8.76	2,2-DCEPA
22.15	470044	55.4	1108	11.08	CIS 1,2-DCE
22.80	442296	51.7	1034	10.34	CHLOROFORM
23.44	221246	49.7	995	9.95	BCM
24.31	400189	55.1	1102	11.02	1,1,1-TCA
24.93	294542	59.8	1196	11.96 o c c r c	1,1-DCPE
25.26	481706	55.9	1118	11.18	CARBON TET
25.90	322876	56.1	1121	11.21	1,2-DCA
26.76	10126	0.0	0	0.00	
26.97	30560	43.1	862	8.62	2-CL ETH VI ETH
27.82	2723	0.0	0	0.00	
28.19	417687	56.9	1137	11.37	TCE
28.86	325632	53.4	1067	10.67	1,2-DCEPA
29.71	265106	52.6	1053	10.53	BRDCLMETHANE
29.91	184477	54.0	1081	10.81	DIBROMOMETHANE
30.83	3509	0.0	0	0.00	
31.68	251276	51.1	1022	10.22	CIS 1,3-DCPE
33.49	205640	50.1	1001	10.01	TRANS 1,3-DCPE
34.05	279357	50.6	1011	10.11	1,1,2-TCA
34.96	193683	49.9	999	9.99	1,3-DCEPA
35.18	450481	54.9	1097	10.97	PCE
35.93	172749	49.0	980	9.80	DIBRCLMETHANE
36.67	103011	50.3	1006	10.06	1,2-DBEA (EDB)
37.62	247247	511.9	10238	102.38	1CL4FBZ (SURR) / 0 2
38.17	97460	54.4	1088	10.88	CHLOROBENZENE
38.32	478588	54.3	1086	10.86	1,1,1,2-PCA
39.01	525233 ✓	5.0	100	1.00	1CL2FBZ (IS) o c
41.68	87253	48.3	967	9.67	BROMOFORM

Continued...

File : c:\ezchrom\chrom\360603.15
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CHK VOA 15
 Acquired : Jun 04, 1996 10:10:02
 Printed : Jun 05, 1996 10:53:31

Channel B Results

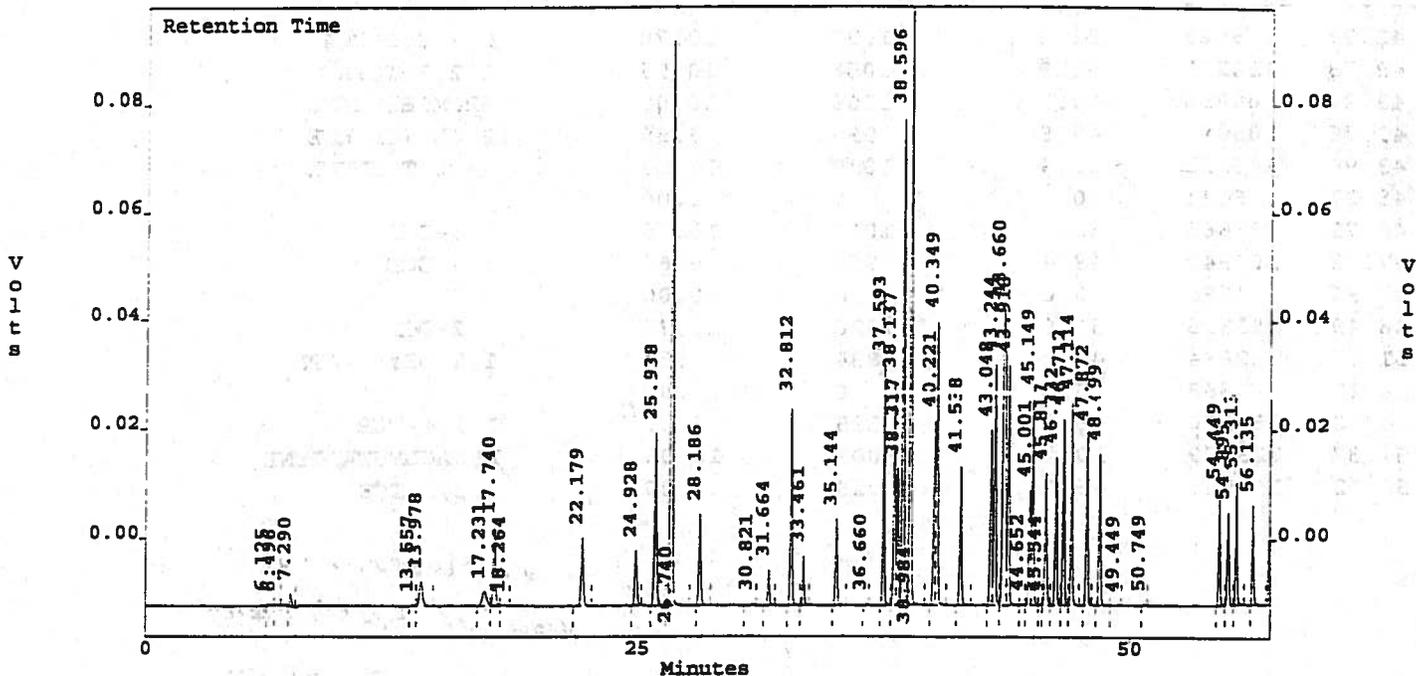
RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
42.24	175533	53.5	1070	10.70	1,1,2,2-PCA
42.78	130225	52.9	1058	10.58	1,2,3-TCPA
43.27	84858	50.3	1006	10.06	BROMOBENZENE
43.76	108078	49.8	996	9.96	2-CL TOLUENE
43.94	146183	51.9	1038	10.38	4-CL TOLUENE
45.27	6631	0.0	0	0.00	
46.72	198662	50.7	1015	10.15	1,3-DCB
47.12	207942	48.4	968	9.68	1,4-DCB
47.96	1190	0.0	0	0.00	
48.49	193335	51.0	1020	10.20	1,2-DCB
51.43	22694	44.2	884	8.84	1,2-DBr-3-CPA
54.17	568	0.0	0	0.00	
54.42	182360	46.8	935	9.35	1,2,4-TCB
54.87	323179	50.2	1003	10.03	HEXACL BUTADIENE
56.12	164952	46.0	920	9.20	1,2,3-TCB

± @ 05 Jun 96 UT
± out of ± 15% range
05 Jun 96 UT

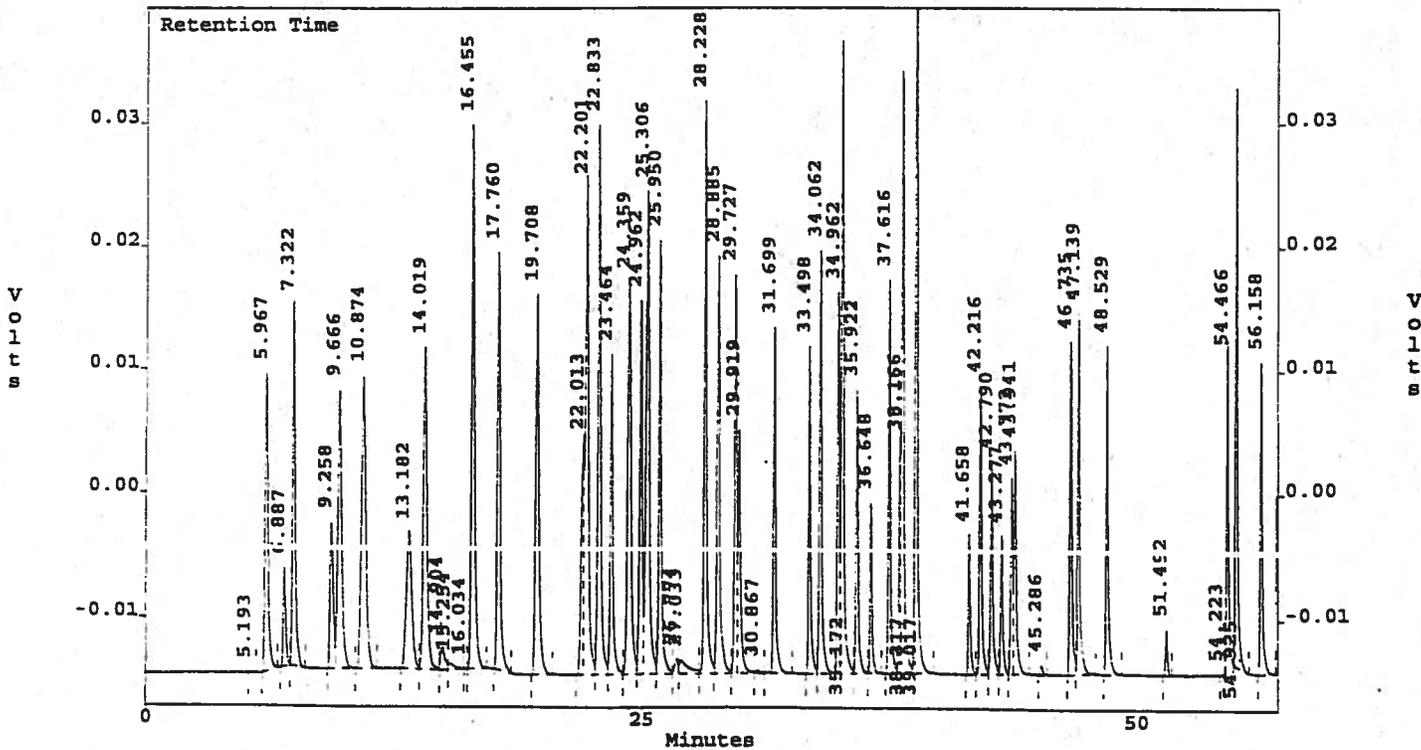
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.19
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CTL VOA 3
 Acquired : Jun 04, 1996 15:08:08
 Printed : Jun 05, 1996 10:54:11

c:\ezchrom\chrom\360603.19 -- Channel A



c:\ezchrom\chrom\360603.19 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.19
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CTL VOA 3
 Acquired : Jun 04, 1996 15:08:08
 Printed : Jun 05, 1996 10:54:13

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.13	5196	0.0	0	0.00	
6.50	1580	0.0	0	0.00	
7.29	15907	38.5	769	7.69	ok 4.4 Vinyl Chloride
13.56	2812	0.0	0	0.00	
13.98	54931	47.3	945	9.45	1,1-dce
17.23	44763	49.7	993	9.93	Mtbe
17.74	123795	44.3	885	8.85	Trans 1,2-dce
18.26	1970	0.0	0	0.00	
22.18	103582	44.7	893	8.93	Cis 1,2-dce
24.93	86163	45.2	905	9.05	1,1-dcpe
25.94	253295	47.0	939	9.39	Benzene
26.74	807161	5.0	100	1.00	Flbenzene (IS) ok
28.19	127602	51.6	1032	10.32	Tce
30.82	2250	0.0	0	0.00	
31.66	43059	47.7	954	9.54	Cis 1,3-dcpe
32.81	241843	42.7	854	8.54	Toluene
33.46	54502	51.4	1028	10.28	Trans 1,3-dcpe
35.14	110883	56.4	1128	11.28	Pce
36.66	1984	0.0	0	0.00	
37.59	251527	438.9	8777	87.77	1cl4fbz (surr) SS
38.14	229382	50.1	1002	10.02	Chlorobenzene
38.32	182848	50.8	1015	10.15	Ethylbenzene
38.60	578291	105.8	2116	21.16	M/P Xylene
38.98	746675	5.0	100	1.00	1cl2flbz (IS) ok
40.22	203595	42.8	856	8.56	O Xylene
40.35	316999	45.4	909	9.09	Styrene
41.54	170097	56.9	1137	11.37	Isopropylbenzene
43.05	200080	44.2	883	8.83	n-propylbenzene
43.24	261897	50.3	1005	10.05	Bromobenzene
43.66	573915	90.7	1814	18.14	1,3,5-tmb/2-cl tol
43.92	253222	43.8	876	8.76	4-cl toluene
44.65	3029	0.0	0	0.00	
45.00	145500	45.7	913	9.13	t-butylbenzene
45.15	241629	51.1	1022	10.22	1,2,4-tmb
45.54	1640	0.0	0	0.00	
45.82	164884	42.0	840	8.40	ok CHEM s-butylbenzene
46.33	172419	42.8	855	8.55	p-isopropyltoluene
46.71	203428	48.1	963	9.63	1,3-dcb
47.11	203889	44.9	898	8.98	1,4-dcb
47.87	184262	46.0	919	9.19	n-butylbenzene
48.50	164328	48.0	959	9.59	1,2-dcb
49.45	1602	0.0	0	0.00	
50.75	2235	0.0	0	0.00	
54.45	109998	49.4	987	9.87	1,2,4-tcb
54.90	103285	51.0	1019	10.19	Hexachlorobutadiene

Continued...

File : c:\ezchrom\chrom\360603.19
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CTL VOA 3
 Acquired : Jun 04, 1996 15:08:08
 Printed : Jun 05, 1996 10:54:14

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
55.31	115583	42.9	857	8.57	Napthalene
56.14	102664	50.9	1019	10.19	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.19
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CTL VOA 3
 Acquired : Jun 04, 1996 15:08:08
 Printed : Jun 05, 1996 10:54:14

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.19	801	0.0	0	0.00	
5.97	253295	59.0	1179	11.79 *	DCDFM
6.89	67912	17.5	350	3.50 ←	CHLOROMETHANE
7.32	271042	46.6	931	9.31	VINYL CHLORIDE
9.26	130193	57.5	1150	11.50	BROMOMETHANE
9.67	320648	51.1	1021	10.21	CHLOROETHANE
10.87	379172	47.3	945	9.45	TCFM
13.18	222353	51.4	1027	10.27	FREON 113
14.02	345930	48.4	967	9.67	1,1-DCE
14.90	28246	0.0	0	0.00	
15.25	12863	0.0	0	0.00	
16.03	626	0.0	0	0.00	
16.46	484482	0.0	0	0.00	METH CHLORIDE
17.76	347347	50.6	1013	10.13	TRANS 1,2-DCE
19.71	360235	52.9	1058	10.58	1,1-DCA
22.01	149364	44.0	879	8.79	2,2-DCPA
22.20	464723	52.3	1046	10.46	CIS 1,2 DCE
22.83	456818	51.1	1022	10.22	CHLOROFORM
23.46	234005	50.3	1007	10.07	BCM
24.36	395951	52.2	1043	10.43	1,1,1-TCA
24.96	285814	55.5	1111	11.11	1,1-DCPE
25.31	473814	52.6	1053	10.53	CARBON TET
25.95	310536	51.6	1033	10.33	1,2-DCA
26.77	13873	0.0	0	0.00	
27.03	34791	46.8	936	9.36	2-CL ETH VI ETH
28.23	399633	51.9	1039	10.39	TCE
28.89	321506	50.4	1008	10.08	1,2-DCPA
29.73	244177	46.6	933	9.33	BRDCLMETHANE
29.92	175321	49.4	987	9.87	DIBROMOMETHANE
30.87	3635	0.0	0	0.00	
31.70	226795	44.1	882	8.82	CIS 1,3-DCPE
33.50	192730	44.9	899	8.99	TRANS 1,3-DCPE
34.06	280843	48.7	974	9.74	1,1,2-TCA
34.96	205302	50.6	1013	10.13	1,3-DCPA
35.17	435699	50.7	1015	10.15	PCE
35.92	177912	48.3	966	9.66	DIBRCLMETHANE
36.65	102524	48.1	962	9.62	1,2-DBEA (EDB)
37.62	241953	479.1	9581	95.81	1CL4FBZ (SURR) r 6
38.17	86175	45.8	917	9.17	CHLOROBENZENE
38.32	457678	49.6	993	9.93	1,1,1,2-PCA
39.02	548810 ✓	5.0	100	1.00	1CL2FBZ (IS) ok
41.66	84826	45.3	907	9.07	BROMOFORM
42.22	186630	54.4	1089	10.89	1,1,2,2-PCA
42.79	135275	52.6	1051	10.51	1,2,3-TCPA
43.28	86157	49.0	980	9.80	BROMOBENZENE

Continued...

File : c:\ezchrom\chrom\360603.19
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CTL VOA 3
 Acquired : Jun 04, 1996 15:08:08
 Printed : Jun 05, 1996 10:54:14

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
43.77	108186	47.8	956	9.56	2-CL TOLUENE
43.94	145629	49.5	990	9.90	4-CL TOLUENE
45.29	5941	0.0	0	0.00	
46.74	199856	48.9	978	9.78	1,3-DCB
47.14	211088	47.0	941	9.41	1,4-DCB
48.53	196795	49.7	995	9.95	1,2-DCB
51.49	24286	45.0	899	8.99	1,2-DBr-3-CPA
54.22	580	0.0	0	0.00	
54.47	171677	42.2	844	8.44 <i>OK CMK</i>	1,2,4-TCB
54.93	324481	48.2	963	9.63	HEXACL BUTADIENE
56.16	174567	46.6	931	9.31	1,2,3-TCB

* * 05 JUN 96 U
 + out of ± 15% range

05 JUN 96 U

4605 JUN 96

Volatiles Instrument 3 Run Log

CTL STD VOAP 0523-3 10.0ug/ml
 CHK STD VOAS 0523-3
 Mix Spk CTL STD
 INT STD IS 0523-07 40.0ug/ml
 EXT SURR ESW 0523-05 20.0ug/ml

Analyst CTDF Date 05 Jun 96
 Printed LT Date 06 Jun 96
 Onto Network _____ Date _____
 Method Used 3VOA0606.MET
 Batch Used 0605E3

*0605E3

Data File Number	SP=	Sample ID	Aliquot	Client ID	Method	Comments	Hnu	pH
36060501	1	CTL VOA	5.0ul		All	1102510w ✓ 1617 Jun 96		
02	2	MTHO BLEW	5.0ml			1102510w ✓ see next pg.		
03	3	4975R.250	20.0ul	MP-9-B	60199	✓ 1617 Jun 96		
04	4	5077R	5.0ml	DWC-91	502.2(5)	✓ see next pg.		
05	5	5078R		CO-201		cap cracked ✓		
06	6	5115R		FB-30		✓		
4980-01(2) 5027-8(2) 5115(1)	07	7	Blk Spk W	5.0ul		All ✓		
5184-1(3) 5271-2(2)		08	Blk Spk W			✓		
09	9	5189R	5.0ml	DWC-92	502.2(5)	✓		
10	10	5190R		CO-203		✓		
11	11	5191R		CO-204		✓		
12	12	5271R		DWC-93		✓		
13	13	5272R		CO-208		✓ 1617 Jun 96		
14	14	4983 4983	5.0ml	BB-03074	601/602	✓ 1617 Jun 96	0	6
15	15	5047s	50.0ul	SEE ext. 109	MEON 8010/8020	✓ DEOFM (cont.) ES added when loading, 55 value doubled divide values by 200 and multiply by 100	0	0
16	16	5048s					✓	
17	1	CHK VOA	5.0ul		All	1617 Jun 96 } 3VOA0606.MET		
18	2	2.0ppb	10.0ul			x10d. ✓		

A new method was made due to shifting on the instrument. No air conditioning in the room, so the compounds are shifting. Method saved as 3VOA0606.MET 06 Jun 96

CTL STD V0AP 0523-3 10.0ug/ml
 CHK STD V0AS 0523-3
 Mix Spk CTL STD
 INT STD IS 0523-07 40.0ug/ml
 EXT SLRR ESW 0523-05 20.0ug/ml

Analyst C/DF Date 05 Jun 96
 Printed 12 Date 06 Jun 96
 Onto Network _____ Date _____
 Method Used SW 3V0A0605.met
 Batch Used 060523

060505 Jun 96

Data File Number	SP#	Sample ID	Aliquot	Client ID	Method	Comments	Final pH
36060501	1	CTL VOA	5.0ul		All	110 = 5.10w ✓	
02	2	MTHO BLW	5.0ml		↓	110 = 5.12w ✓ #6 Jun 96	
03	3	4975RA250	20.0ul	M 2-9-B	60144	✓	
04	4	5077R	5.0ml	DWC-91	502.2(5)	✓ #6 Jun 96	
05	5	5078R	↓	CO-201	↓	cap cracked ✓ ↓	
06	6	5115K	↓	FB 30	↓	✓ #6 Jun 96	
4980-01(2) 5077-8(2) 5115(1)	07	2	ALK Spk W	5.0ul	All	✓ #6 Jun 96	
5189-11(3) 5271-2(2)	08	8	ALK Spk Dup W	↓	↓	✓ ↓	
09	9	5189K	5.0ml	DWC-92	502.2(5)	✓	
10	10	5190K	↓	CO-203	↓	✓	
11	11	5191K	↓	CO-204	↓	✓ ↓	
12	12	5271R	↓	DWC-93	↓	✓ #6 Jun 96	
13	13	5272R	↓	CO-208	↓	✓ ↓	
14	14	4983 4983-4	5.0ml	BB-03074	601/602	✓	0 6
15	15	5047s	50.0ul	SEC EXT. 10g	MEDIA B010/2020	✓ 0.07m	ES added 2x 5.101 29.03
16	16	5048s	↓		↓	✓ 0.07m	
17	1	CHEVDA	5.0ul		All		
18	2	2.0ppb	10.0ul		↓	x10dil	

06 Jun 96

INTERNAL STANDARD WORKSHEET

METHOD: All Volatiles
DATE: 03 JUN 96

INSTRUMENT: 3
OPERATOR: LT

STANDARD CONC. (ppb)	PID DETECTOR FLUOROBENZENE	PID DETECTOR 1-CHLORO-2-FLUOROBENZENE	HALL (ELCD) DETECTOR 1-CHLORO-2-FLUOROBENZENE
	RESPONSE AREA	RESPONSE AREA	RESPONSE AREA
<u>0.4</u>	<u>788060</u>	<u>730600</u>	<u>543537</u>
<u>0.5</u>	<u>786608</u>	<u>726002</u>	<u>531039</u>
<u>1.0</u>	<u>826885</u>	<u>760697</u>	<u>562683</u>
<u>5.0</u>	<u>820406</u>	<u>762154</u>	<u>593539</u>
<u>10.0</u>	<u>823972</u>	<u>773407</u>	<u>560592</u>
<u>25.0</u>	<u>828883</u>	<u>785580</u>	<u>627335</u>
<u>50.0</u>	<u>811964</u>	<u>789482</u>	<u>671429</u>
MEAN	<u>812397</u>	<u>761132</u>	<u>585022</u>
UPPER LIMIT (130%)	<u>1056116</u>	<u>989472</u>	<u>760529</u>
LOWER LIMIT (70%)	<u>568678</u>	<u>532792</u>	<u>409515</u>
Std. Dev.	<u>16636</u>	<u>23052</u>	<u>46077</u>
+ 3 Std. Dev.	<u>862305 (100%)</u>	<u>830288 (109%)</u>	<u>723253 (124%)</u>
- 3 Std. Dev.	<u>762489 (94%)</u>	<u>691976 (91%)</u>	<u>446291 (76%)</u>

Comments:

Initials LT Date 05 JUN 96

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.5 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:15

Channel A results

RT(min)	Pk Area	Air (ng)	Soil (µg/kg)	Sols (µg/L)	Compound
6.10	18057	0.0	0	0.00	
6.99	5307	0.0	0	0.00	
7.26	4308	2.5	50	0.50	Vinyl Chloride
13.52	9729	0.0	0	0.00	
13.94	2423	2.5	50	0.50	1,1-dce
17.22	2255	2.5	50	0.50	Mtbe
17.70	5379	2.5	50	0.50	Trans 1,2-dce
18.32	1742	0.0	0	0.00	
22.15	5180	2.5	50	0.50	Cis 1,2-dce
24.90	4141	2.5	50	0.50	1,1-dcpe
25.92	10885	2.5	50	0.50	Benzene
26.73	786608	5.0	100	1.00	Flbenzene (IS)
28.17	8619	2.5	50	0.50	Tce 0.0119 ar
31.65	2277	2.5	50	0.50	Cis 1,3-dcpe
32.79	11616	2.5	50	0.50	Toluene 0.0159 ar 0.0160 ar
33.44	2935	2.5	50	0.50	Trans 1,3-dcpe
35.13	5424	2.5	50	0.50	Pce
37.58	11674	25.0	500	5.00	1cl4fbz (surr)
38.14	10916	2.5	50	0.50	Chlorobenzene
38.31	9718	2.5	50	0.50	Ethylbenzene
38.59	21358	5.0	100	1.00	M/P Xylene
38.98	726002	5.0	100	1.00	1cl2flbz (IS)
40.22	9382	2.5	50	0.50	O Xylene 0.0129 2 a.c.
40.35	12267	2.5	50	0.50	Styrene
41.55	8178	2.5	50	0.50	Isopropylbenzene
43.07	9132	2.5	50	0.50	n-propylbenzene
43.20	10020	2.5	50	0.50	Bromobenzene
43.68	22503	5.0	100	1.00	1,3,5-tmb/2-cl tol
43.93	10808	2.5	50	0.50	4-cl toluene
45.00	7102	2.5	50	0.50	t-butylbenzene
45.16	10347	2.5	50	0.50	1,2,4-tmb
45.81	8101	2.5	50	0.50	s-butylbenzene
46.32	8571	2.5	50	0.50	p-isopropyltoluene
46.70	9310	2.5	50	0.50	1,3-dcb
47.10	9648	2.5	50	0.50	1,4-dcb 0.0133 ar
47.65	8815	2.5	50	0.50	n-butylbenzene
48.48	8761	2.5	50	0.50	1,2-dcb 0.0120 7 ar
49.44	1610	0.0	0	0.00	
54.42	5143	2.5	50	0.50	1,2,4-tcb
54.86	5641	2.5	50	0.50	Hexachlorobutadiene
55.29	5511	2.5	50	0.50	Napthalene
56.12	4677	2.5	50	0.50	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.5 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:15

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.16	568	0.0	0	0.00	
5.92	1915	2.5	50	0.50	DCDFM 0.0036 ar
6.86	7622	2.5	50	0.50	CHLOROMETHANE
7.31	13727	2.5	50	0.50	VINYL CHLORIDE
7.50	5109	0.0	0	0.00	
7.90	431	0.0	0	0.00	
9.24	1547	2.5	50	0.50	BROMOMETHANE
9.63	9642	2.5	50	0.50	CHLOROETHANE
10.14	631	0.0	0	0.00	
10.31	705	0.0	0	0.00	
10.80	11985	2.5	50	0.50	TCFM
13.13	7505	2.5	50	0.50	FREON 113
13.99	11189	2.5	50	0.50	1,1-DCE
16.43	458209	2.5	50	0.50	METH CHLORIDE
17.71	10455	2.5	50	0.50	TRANS 1,2-DCE
19.65	11399	2.5	50	0.50	1,1-DCA
21.97	5324	2.5	50	0.50	2,2-DCEP
22.18	17492	2.5	50	0.50	CIS 1,2-DCE
22.79	19822	2.5	50	0.50	CHLOROFORM
23.43	4951	2.5	50	0.50	BCM
24.33	15221	2.5	50	0.50	1,1,1-TCA
24.95	10133	2.5	50	0.50	1,1-DCPE
25.30	16249	2.5	50	0.50	CARBON TET
25.92	10232	2.5	50	0.50	1,2-DCA
26.76	12533	0.0	0	0.00	
28.20	21555	2.5	50	0.50	TCE 0.0406 ar
28.88	12306	2.5	50	0.50	1,2-DCEP
29.71	6905	2.5	50	0.50	BRODICLIMETHANE
29.93	2736	2.5	50	0.50	DIBROMOMETHANE
31.68	8942	2.5	50	0.50	CIS 1,3-DCPE
33.47	7061	2.5	50	0.50	TRANS 1,3-DCPE
34.04	9447	2.5	50	0.50	1,1,2-TCA
34.96	6711	2.5	50	0.50	1,3-DCEP
35.16	16863	2.5	50	0.50	PCE
35.93	2554	2.5	50	0.50	DIBRODICLIMETHANE
36.67	1168	2.5	50	0.50	1,2-DBEA (EDB)
37.62	9872	25.0	500	5.00	1,1,1,2-TCB (Surr)
38.16	2870	2.5	50	0.50	CHLOROBENZENE
38.32	16972	2.5	50	0.50	1,1,1,2-PCA
39.01	331637	5.0	100	1.00	1,1,1,2,2-PCB (IS)
41.68	309	2.5	50	0.50	BROMOFORM 0.0005 B AR IS JUN 96 LT
42.25	6576	2.5	50	0.50	1,1,2,2-PCA
42.79	4369	2.5	50	0.50	1,2,3-TCBP
43.33	522	2.5	50	0.50	BROMOBENZENE
43.77	4146	2.5	50	0.50	2-CL TOLUENE

Continued...

① 05 JUN 96 LT

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 05 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:15

Channel B Results

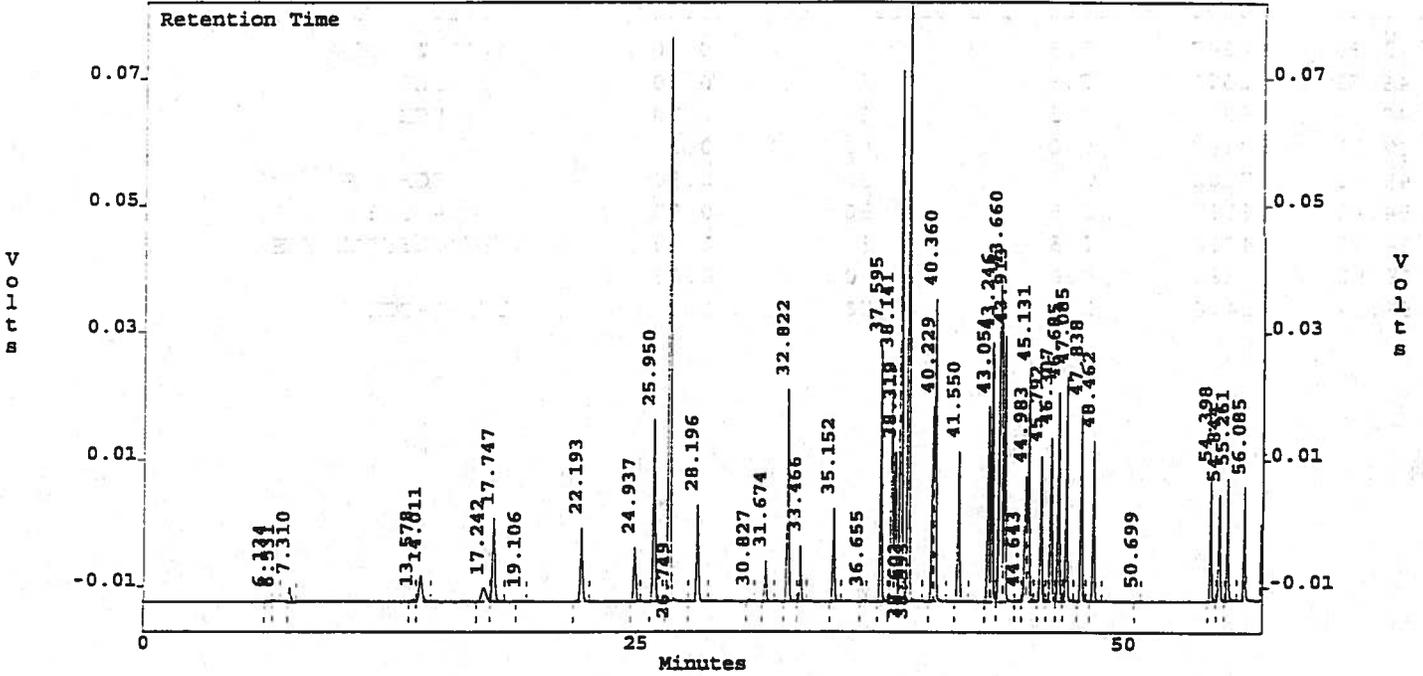
RT (min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
43.96	4847	2.5	50	0.50	4-CL TOLUENE
46.72	6071	2.5	50	0.50	1,3-DCB
47.13	6917	2.5	50	0.50	1,4-DCB
47.55	367	0.0	0	0.00	
48.51	7102	2.5	50	0.50	1,2-DCB 0.0349
54.46	6367	2.5	50	0.50	1,2,4-TCE
54.89	14762	2.5	50	0.50	HEXACHLOROCYCLOHEPTADIENE
55.62	583	0.0	0	0.00	
56.14	5406	2.5	50	0.50	1,2,3-TCE

+ 0.05 JUN 96
 05 JUN 96 U

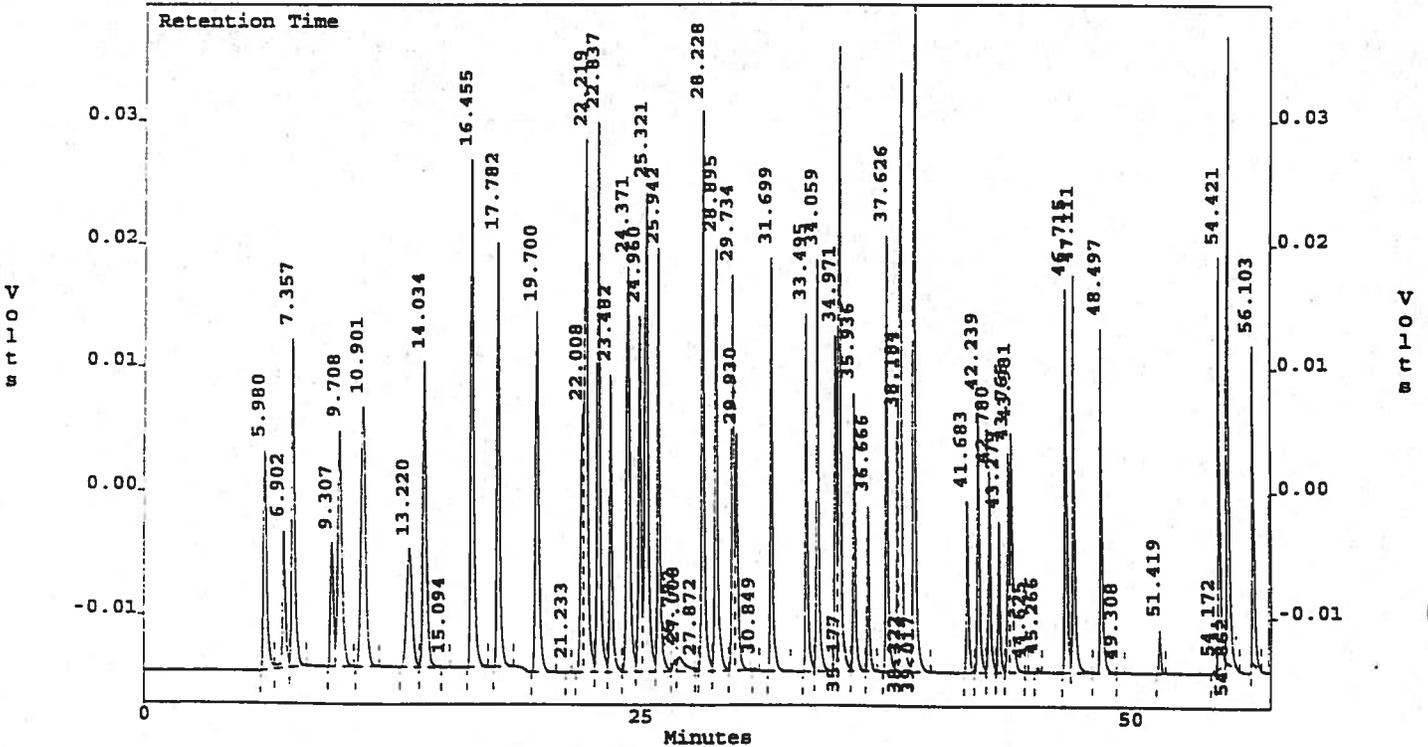
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.01
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CTL VOA 1
 Acquired : Jun 05, 1996 13:39:57
 Printed : Jun 06, 1996 07:41:03

c:\ezchrom\chrom\360605.01 -- Channel A



c:\ezchrom\chrom\360605.01 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.01
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CTL VOA 1
 Acquired : Jun 05, 1996 13:39:57
 Printed : Jun 06, 1996 07:41:05

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.13	3304	0.0	0	0.00	
6.53	2146	0.0	0	0.00	
7.31	17971	53.1	1062	10.62	Vinyl Chloride
13.58	3987	0.0	0	0.00	
14.01	49676	49.1	982	9.82	1,1-dce
17.24	36322	46.5	931	9.31	Mtbe
17.75	111856	45.9	918	9.18	Trans 1,2-dce
19.11	1836	0.0	0	0.00	
22.19	97919	48.4	968	9.68	Cis 1,2-dce
24.94	72945	44.3	885	8.85	1,1-dcpe
25.95	227671	48.6	972	9.72	Benzene
26.75	683939	5.0	100	1.00	Flbenzene (IS)
28.20	115936	54.3	1087	10.87	Tce
30.83	2525	0.0	0	0.00	
31.67	41912	53.7	1074	10.74	Cis 1,3-dcpe
32.82	221144	44.7	895	8.95	Toluene
33.47	53359	58.3	1167	11.67 <i>or hall</i>	Trans 1,3-dcpe
35.15	102509	60.3	1206	12.06 ↓	Pce
36.65	1752	0.0	0	0.00	
37.59	230404	461.0	9219	92.19	1cl4fbz (surr) ? 2
38.14	214126	54.3	1085	10.85	Chlorobenzene
38.32	172664	56.1	1121	11.21	Ethylbenzene
38.60	535302	113.1	2261	22.61	M/P Xylene
38.99	647880	5.0	100	1.00	1cl2flbz (IS) /OW
40.23	186647	45.0	900	9.00	O Xylene
40.36	288742	47.5	950	9.50	Styrene
41.55	158464	61.3	1227	12.27 *	Isopropylbenzene
43.05	185247	46.9	937	9.37	n-propylbenzene
43.25	236636	52.4	1048	10.48	Bromobenzene
43.66	530979	96.2	1924	19.24	1,3,5-tmb/2-cl tol
43.91	236658	46.8	937	9.37	4-cl toluene
44.64	2584	0.0	0	0.00	
44.98	133829	48.2	965	9.65	t-butylbenzene
45.13	225020	54.9	1098	10.98	1,2,4-tmb
45.79	154730	45.0	900	9.00	s-butylbenzene
46.31	160865	45.6	912	9.12	p-isopropyltoluene
46.69	194056	53.9	1078	10.78	1,3-dcb
47.08	191846	49.1	981	9.81	1,4-dcb
47.84	175602	50.2	1004	10.04	n-butylbenzene
48.46	147397	49.8	996	9.96	1,2-dcb
50.70	1649	0.0	0	0.00	
54.40	106499	56.0	1120	11.20	1,2,4-tcb
54.84	101066	58.0	1161	11.61 * ↓	Hexachlorobutadiene
55.26	100302	42.9	858	8.58	Napthalene
56.09	74823	42.0	840	8.40 <i>or hall</i>	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.01
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CTL VOA 1
 Acquired : Jun 05, 1996 13:39:57
 Printed : Jun 06, 1996 07:41:06

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.98	202980	51.0	1020	10.20	DCDFM
6.90	110510	32.0	640	6.40 <i>ok B5D</i>	CHLOROMETHANE
7.36	267039	49.3	986	9.86	VINYL CHLORIDE
9.31	112075	53.4	1067	10.67	BROMOMETHANE
9.71	279136	47.7	955	9.55	CHLOROETHANE
10.90	356429	47.7	953	9.53	TCFM
13.22	195054	48.4	969	9.69	FREON 113
14.03	318618	47.8	957	9.57	<i>(2) 11 Jun 96</i> 1,1-DCE
15.09	696	0.0	0	0.00	<i>Current Contamination See Doc</i>
16.46	473600	2.3	46	0.46 <i>ok B5D</i>	METH CHLORIDE
17.78	336400	52.7	1054	10.54 <i>10.0</i>	TRANS 1,2-DCE
19.70	343866	54.2	1084	10.84	1,1-DCA
21.23	396	0.0	0	0.00	
22.01	194557	60.8	1217	12.17 <i>ok B12SPK</i>	2,2-DCPA
22.22	476192	57.7	1154	11.54	CIS 1,2-DCE
22.84	462620	55.7	1113	11.13	CHLOROFORM
23.48	218927	50.5	1011	10.11	BCM
24.37	405699	57.4	1148	11.48	1,1,1-TCA
24.96	265716	55.4	1109	11.09	1,1-DCPE
25.32	483339	57.6	1152	11.52	CARBON TET
25.94	301062	53.7	1074	10.74	1,2-DCA
26.78	9725	0.0	0	0.00	
27.01	32292	46.6	933	9.33	2-CL ETH VI ETH
27.87	1809	0.0	0	0.00	
28.23	397700	55.6	1112	11.12	TCE
28.90	328058	55.3	1105	11.05	1,2-DCPA
29.73	251803	51.4	1028	10.28	BRDICLMETHANE
29.99	171902	51.9	1036	10.36	DIBROMOMETHANE
30.85	1921	0.0	0	0.00	
31.70	263310	55.0	1101	11.01	CIS 1,3-DCPE
33.49	208522	52.1	1043	10.43	TRANS 1,3-DCPE
34.06	265401	49.4	988	9.88	1,1,2-TCA
34.97	186167	49.3	986	9.86	1,3-DCPA
35.18	439822	55.0	1101	11.01	PCE
35.94	174826	50.8	1017	10.17	DIBRCLMETHANE
36.67	98535	49.5	990	9.90	1,2-DBEA (EDB)
37.63	259602	552.5	11050	110.50	1CL4FBZ (SURR) <i>110</i>
38.18	90635	51.9	1038	10.38	CHLOROBENZENE
38.32	483713	56.4	1128	11.28	1,1,1,2-PCA
39.02	511349	5.0	100	1.00	1CL2FBZ (IS) <i>ok</i>
41.68	101653	56.8	1136	11.36	BROMOFORM
42.24	172730	54.1	1082	10.82	1,1,2,2-PCA
42.78	127368	53.1	1062	10.62	1,2,3-TCPA
43.28	91410	55.1	1103	11.03	BROMOBENZENE
43.76	117582	55.3	1106	11.06	2-CL TOLUENE

Continued...

File : c:\ezchrom\chrom\360605.01
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : CTL VOA 1
 Acquired : Jun 05, 1996 13:39:57
 Printed : Jun 06, 1996 07:41:06

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
43.93	161852	59.0	1179	11.79 <i>ok BS</i>	4-CL TOLUENE
44.63	455	0.0	0	0.00	
45.27	3847	0.0	0	0.00	
46.72	221606	58.0	1160	11.60 <i>ok BS</i>	1,3-DCB
47.11	236134	56.3	1126	11.26	1,4-DCB
48.50	211522	57.2	1143	11.43	1,2-DCB
49.31	865	0.0	0	0.00	
51.42	23285	45.9	918	9.18	1,2-DBr-3-CPA
54.17	1886	0.0	0	0.00	
54.42	210980	55.5	1110	11.10	1,2,4-TCB
54.86	365322	58.4	1167	11.67 <i>ok BS</i>	HEXACL BUTADIENE
56.10	173074	49.5	990	9.90	1,2,3-TCB

* out in CTC, nm for the day
 + * okay in blk splc

06 Jun 96 UT

xw

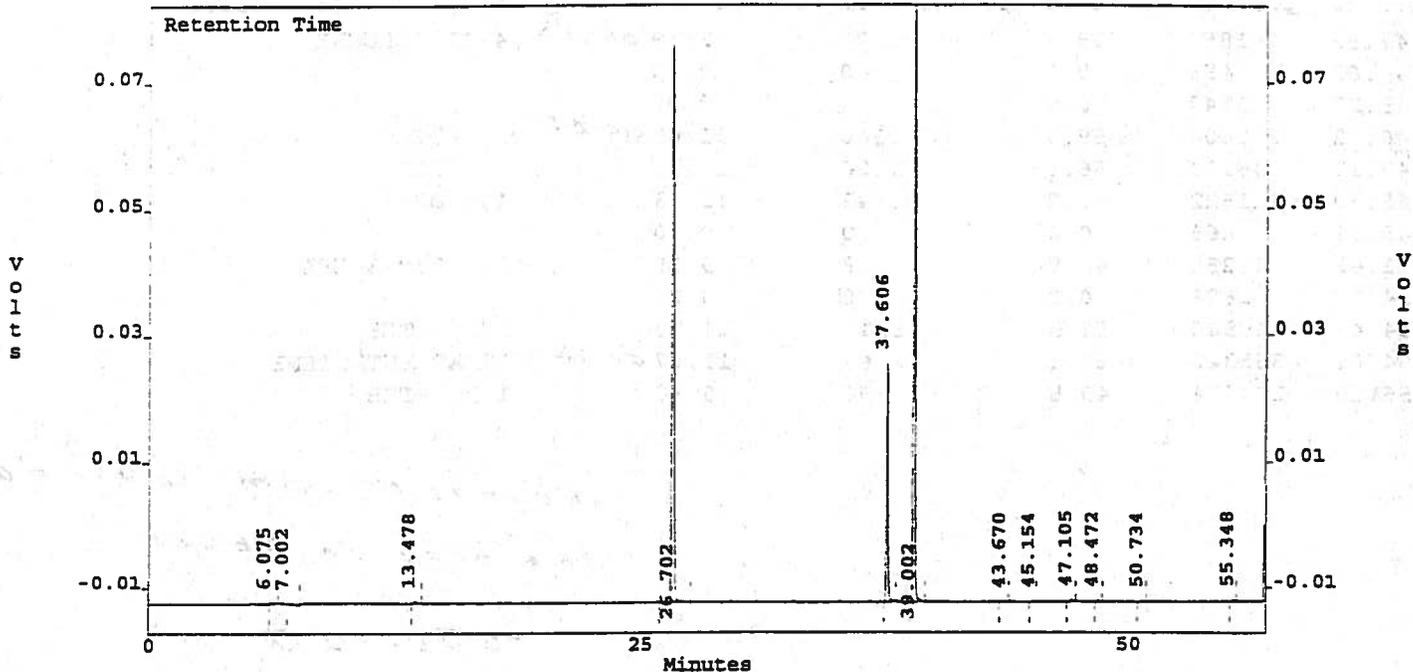
11 Jun 96

AB 17 Jun 96

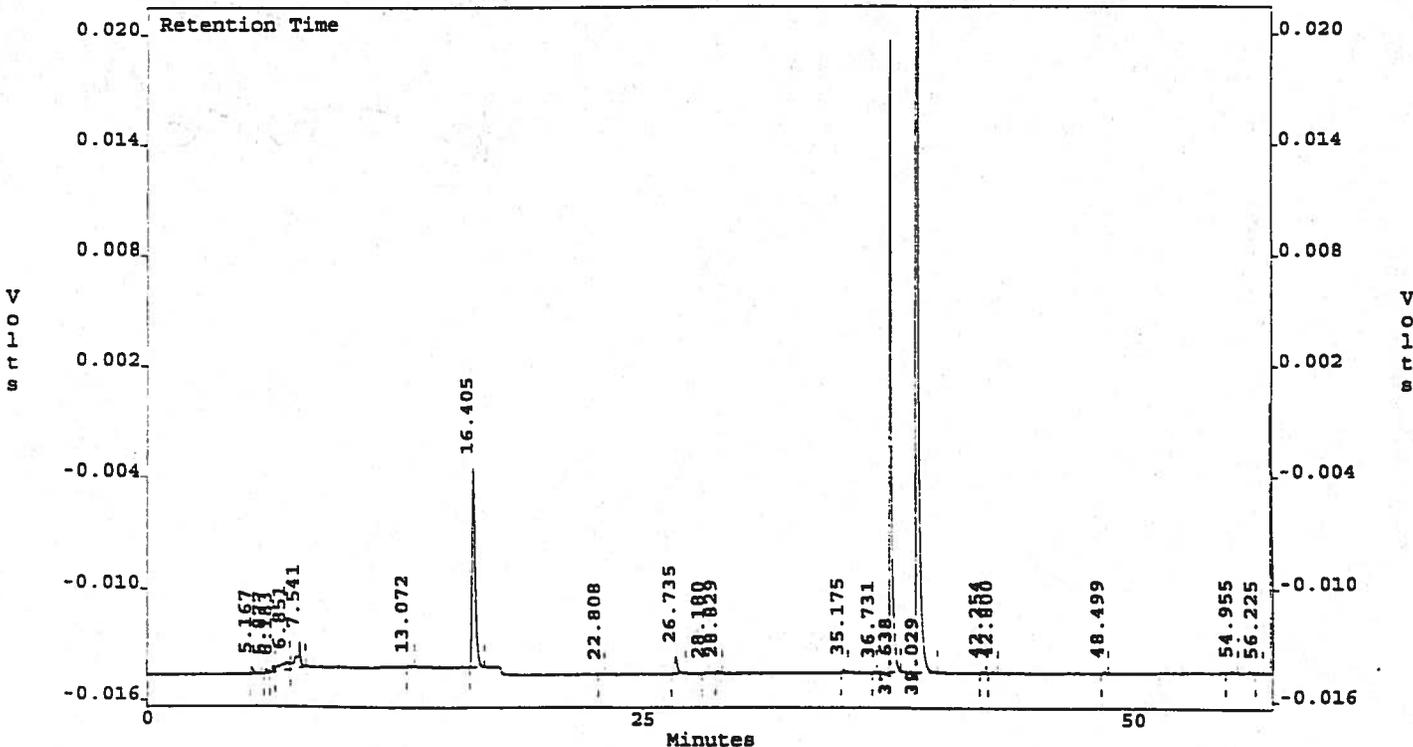
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.02
Method : c:\ezchrom\chrom\3voa0603.met
Sample ID : MTHD BLKw 2
Acquired : Jun 05, 1996 14:53:04
Printed : Jun 06, 1996 07:41:16

c:\ezchrom\chrom\360605.02 -- Channel A



c:\ezchrom\chrom\360605.02 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.02
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : MTHD BLKw 2
 Acquired : Jun 05, 1996 14:53:04
 Printed : Jun 06, 1996 07:41:18

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.08	2765	0.0	0	0.00	
7.00	2407	0.0	0	0.00	
13.48	4032	0.0	0	0.00	
26.70	683590	5.0	100	1.00	Flbenzene (IS)
37.61	219753	445.9	8918	89.18	1cl4fbz (surr) 89
39.00	640951	5.0	100	1.00	1cl2flbz (IS) low
43.67	1775	8.0	159	1.59 <i>nm</i>	1,3,5-tmb/2-cl tol
45.15	1671	0.0	0	0.00	1,2,4-tmb
47.10	3027	3.2	64	0.64 <i>nm</i>	1,4-dcb @ 0.0674296
48.47	1853	2.4	47	0.47 <i>nm</i>	1,2-dcb
50.73	1539	0.0	0	0.00	
55.35	1914	2.8	55	0.55 <i>nm</i>	Napthalene

*low IS okay, all
 compounds reported
 from hall
 except 601/602 which
 does not have IS
 criteria.
 (E) AB06Jun96*

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.02
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : MTHD BLKw 2
 Acquired : Jun 05, 1996 14:53:04
 Printed : Jun 06, 1996 07:41:19

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.17	3735	0.0	0	0.00	0.00 ^{06 Jun 96}
5.88	1744	3.5	70	0.70	0.70 ^{06 Jun 96} DCDFM by a ✓
6.18	2078	0.0	0	0.00	
6.85	13470	2.1	41	0.41	CHLOROMETHANE
7.54	18657	0.0	0	0.00	
13.07	783	1.3	26	0.26	FREON 113
16.41	118850	0.0	0	0.00 2.4 ✓	METH CHLORIDE ^{calc. from cor.}
22.81	557	0.0	0	0.00	CHLOROFORM ^{see DOC}
26.74	10472	0.0	0	0.00	
28.18	526	0.0	0	0.00	TCE
28.83	1182	0.0	0	0.00	1,2-DCPA
35.18	1454	0.0	0	0.00	PCE
36.73	447	3.8	77	0.77	1,2-DBEA (EDB)
37.64	246832	512.4	10248	102.48	1CL4FBZ (SURR) 102
39.03	523817 ✓	5.0	100	1.00	1CL2FBZ (IS) OK
42.25	836	0.7	14	0.14	1,1,2,2-PCA
42.80	1093	1.1	22	0.22	1,2,3-TCPA
48.50	1032	1.7	33	0.33	1,2-DCB
54.96	1217	0.0	0	0.00	HEXAFLBUTADIENE
56.22	572	0.9	18	0.18	1,2,3-TCB

nm. not required for days
analysis

06 JUN 96

AB06 JUN 96

xw

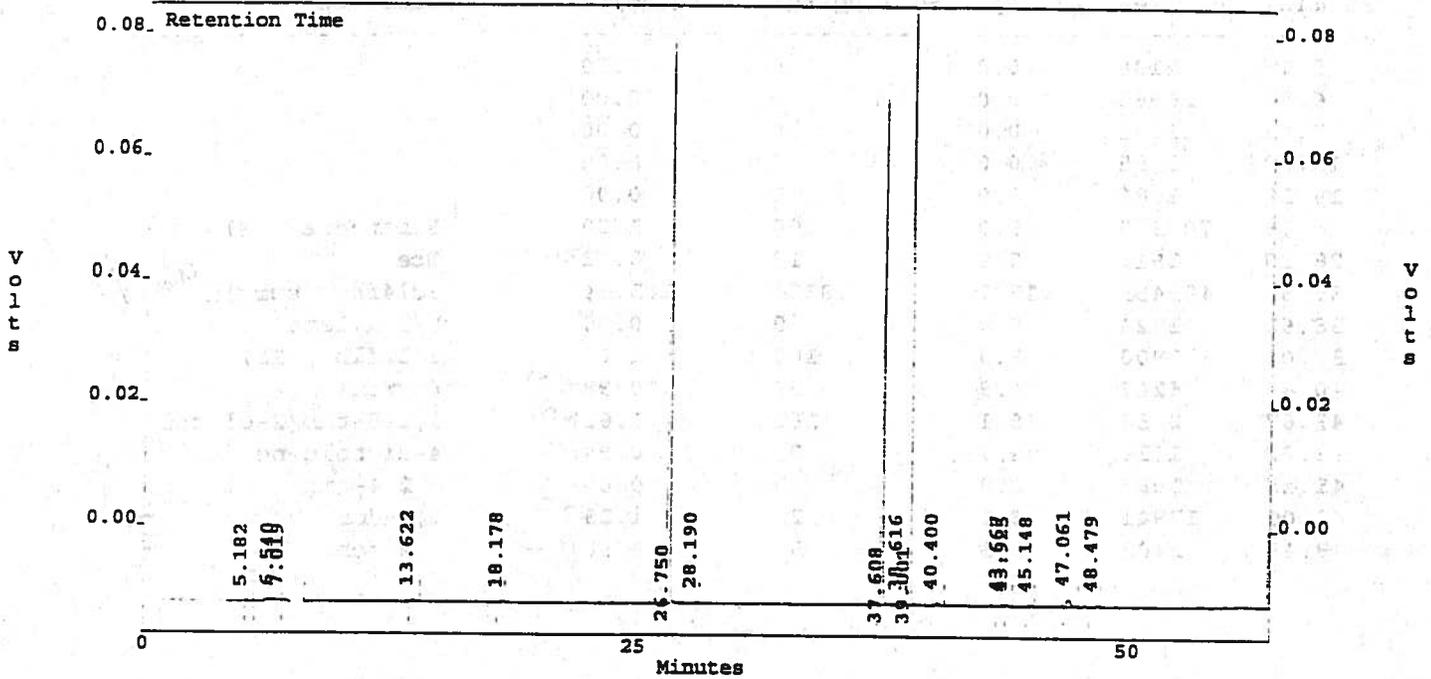
11 Jun 96

AB17 JUN 96

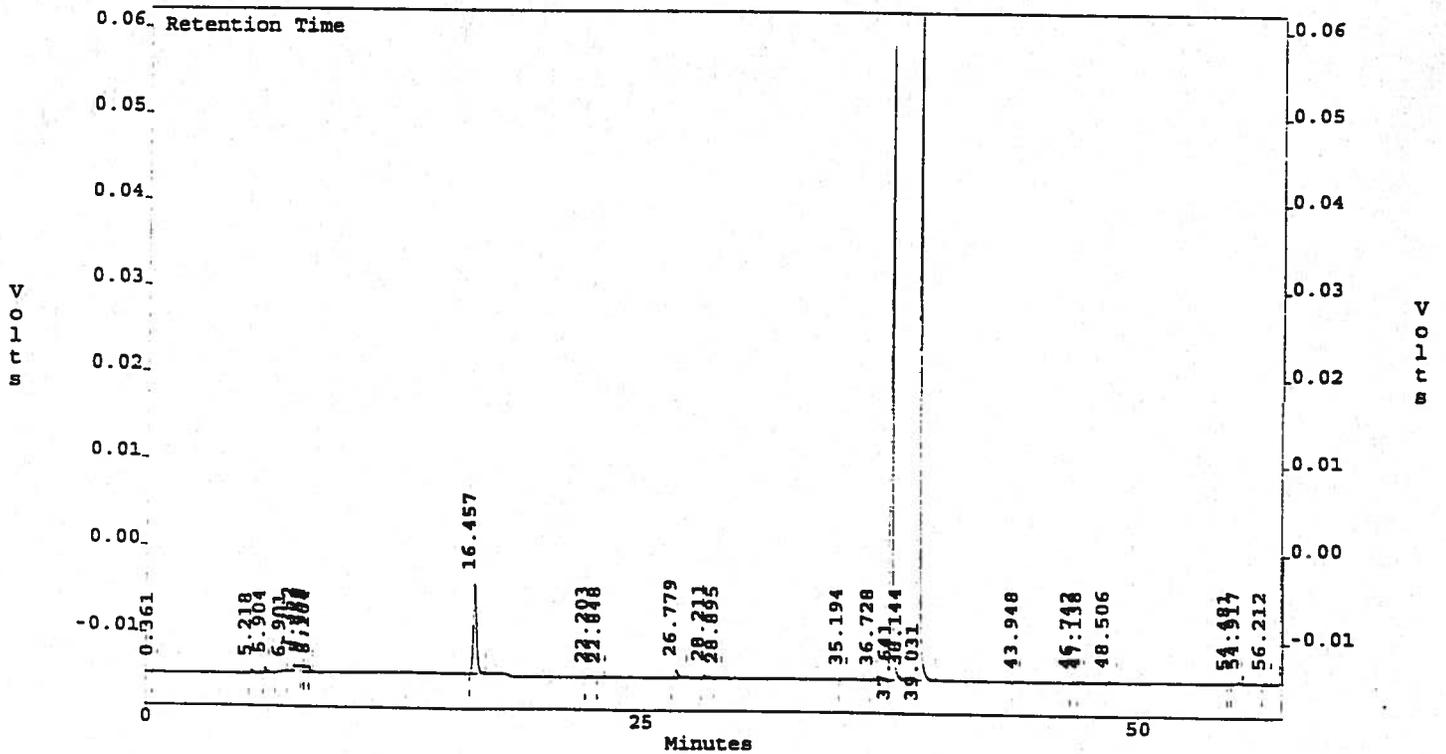
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.15
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 5047s 15
 Acquired : Jun 06, 1996 06:59:09
 Printed : Jun 06, 1996 09:55:46

c:\ezchrom\chrom\360605.15 -- Channel A



c:\ezchrom\chrom\360605.15 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.15
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 5047s 15
 Acquired : Jun 06, 1996 06:59:09
 Printed : Jun 06, 1996 09:55:48

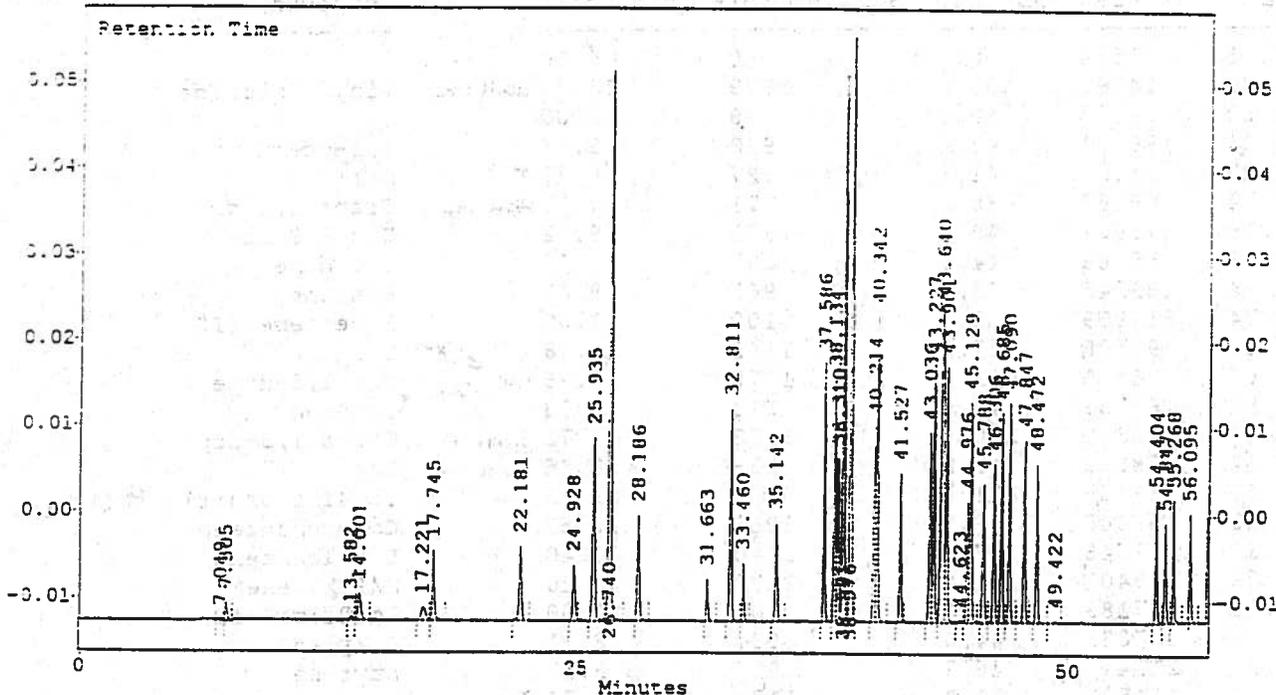
Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
5.18	2136	0.0	0	0.00	
6.54	26965	0.0	0	0.00	
7.02	13691	0.0	0	0.00	
13.62	3795	0.0	0	0.00	
18.18	1686	0.0	0	0.00	
26.75	702375	5.0	100	1.00	Flbenzene (IS)
28.19	1919	0.9	18	0.18 <i>ML</i>	Tce
37.61	499459	917.7	18354	183.54	1,1,1-trichloroethane (surr) <i>92.1. ✓</i>
38.62	1724	0.0	0	0.00	M/P Xylene
39.00	671800	5.0	100	1.00	1,1,2-trichloroethane (IS)
40.40	6247	4.9	98	0.98 <i>NM</i>	Styrene
43.67	2458	8.1	161	1.61 <i>NM</i>	1,3,5-trimethylbenzene/2-chlorotoluene
43.92	1538	4.7	94	0.94 <i>NC</i>	4-chlorotoluene
45.15	1997	0.0	0	0.00	1,2,4-trimethylbenzene
47.06	17941	6.1	123	1.23 <i>NC</i>	1,4-dichlorobenzene
48.48	2402	2.5	50	0.50 <i>NC</i>	1,2-dichlorobenzene

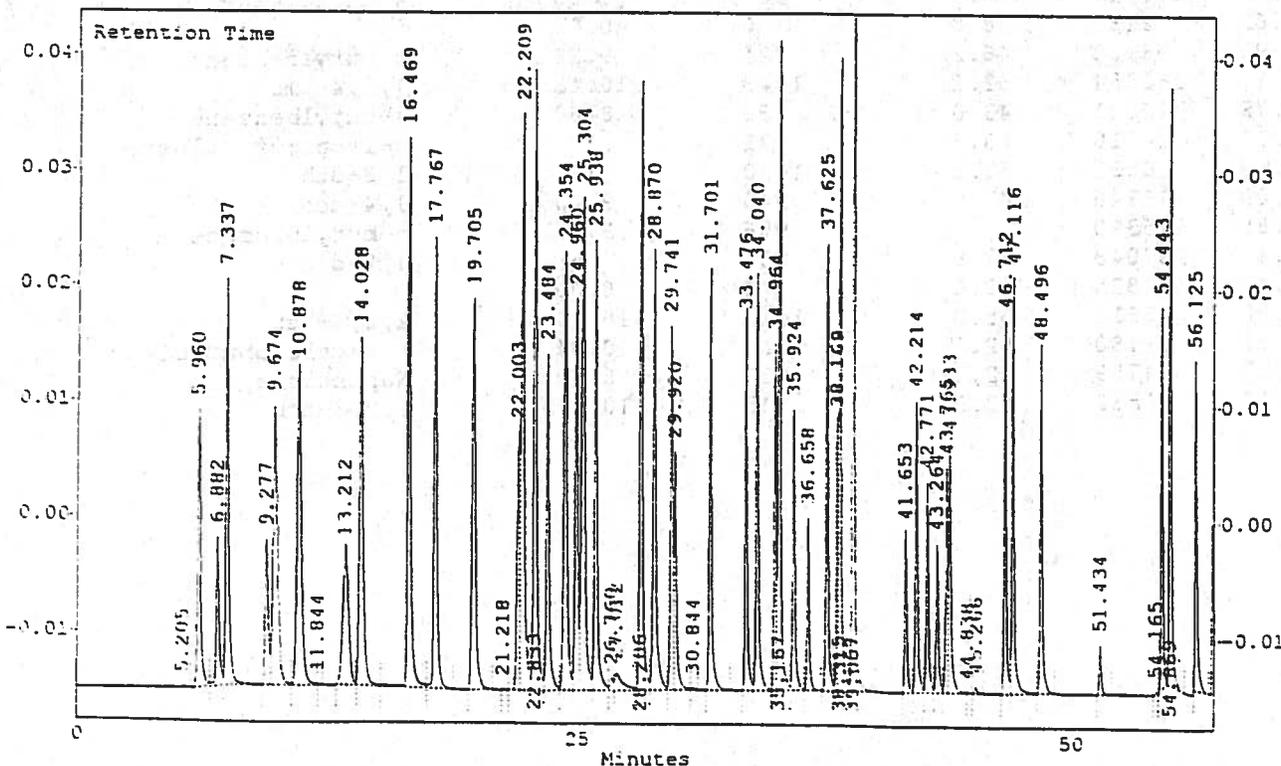
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.01
 Method : c:\ezchrom\voatemp\3vca0603.met
 Sample ID : CTL VCA 9
 Acquired : Jun 08, 1996 18:38:59
 Printed : Jun 10, 1996 08:47:34

c:\ezchrom\voatemp\360608.01 -- Channel A



c:\ezchrom\voatemp\360608.01 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.01
 Method : c:\ezchrom\voatemp\3voa0603.met
 Sample ID : CTL VCA 9
 Acquired : Jun 08, 1996 18:38:59
 Printed : Jun 10, 1996 08:47:36

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
7.05	2584	0.0	0	0.00	
7.30	14791	59.0	1179	11.79	Hall OK! Vinyl Chloride
13.58	4077	0.0	0	0.00	
14.00	36961	48.6	973	9.73	1,1-dce
17.22	24154	41.3	827	8.27	* Mtbe
17.74	69163	38.6	771	7.71	Hall OK! Trans 1,2-dce
22.18	73909	48.6	972	9.72	Cis 1,2-dce
24.93	55668	44.8	897	8.97	1,1-dcpe
25.94	169545	48.2	963	9.63	Benzene
26.74	513989	5.0	100	1.00	Flbenzene (IS)
28.19	91508	57.4	1148	11.48	Tce
31.66	31563	53.8	1076	10.76	* @ XV 11 Jun 96 Cis 1,3-dcpe
32.81	161739	43.6	873	8.73	Toluene
33.46	40311	58.6	1172	11.72	Hall OK Trans 1,3-dcpe
35.14	78893	61.8	1236	12.36	Hall OK Pce
37.59	169439	451.7	9035	90.35	1cl4fbz (surr) 90
38.13	158049	53.2	1063	10.63	Chlorobenzene
38.31	131648	57.0	1140	11.40	Ethylbenzene
38.59	395401	111.0	2220	22.20	M/P Xylene
39.98	487183	5.0	100	1.00	1cl2flbz (IS)
40.21	137082	44.0	881	8.81	O Xylene
40.34	211443	46.3	927	9.27	Styrene
41.53	114509	58.8	1176	11.76	* Isopropylbenzene
43.04	133181	45.0	899	8.99	n-propylbenzene
43.23	173055	50.9	1018	10.18	Bromobenzene
43.64	385226	93.1	1861	18.61	1,3,5-tmb/2-cl tol
43.90	170217	45.0	900	9.00	4-cl toluene
44.62	2285	0.0	0	0.00	
44.98	96168	46.2	924	9.24	t-butylbenzene
45.13	160854	52.1	1043	10.43	1,2,4-tmb
45.79	110501	43.0	860	8.60	s-butylbenzene
46.31	114910	43.5	871	8.71	p-isopropyltoluene
46.69	140531	51.5	1030	10.30	1,3-dcb
47.09	138746	47.0	940	9.40	1,4-dcb
47.85	125390	47.8	956	9.56	n-butylbenzene
48.47	107048	47.9	958	9.58	1,2-dcb
49.42	1825	0.0	0	0.00	
54.40	73816	51.0	1019	10.19	1,2,4-tcb
54.85	69480	52.7	1054	10.54	Hexachlorobutadiene
55.27	74759	42.5	850	8.50	Napthalene
56.10	68532	52.3	1045	10.45	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.C1
 Method : c:\ezchrom\voatemp\3vca0603.met
 Sample ID : CTL VOA 9
 Acquired : Jun 08, 1996 16:38:59
 Printed : Jun 10, 1996 09:47:36

Channel 5 Results

RT(min)	pK Area	ng	Soil(µg/kg)	Soln(µg/l)	Compound
5.20	1250	0.0	0	0.00	
5.96	241870	51.8	1036	10.36	DCDFM
6.88	125799	31.0	621	6.21**	CHLOROMETHANE
7.34	324755	51.2	1024	10.24	VINYL CHLORIDE
9.28	133855	54.3	1087	10.87	BROMOMETHANE
9.67	340193	49.6	993	9.93	CHLOROETHANE
10.88	454347	51.7	1034	10.34	TCFM
11.84	976	0.0	0	0.00	
13.21	241512	51.1	1022	10.22	FREON 113
14.03	390301	49.9	998	9.98	1,1-DCE
16.47	530992	0.0	0	0.00***=10.0	METH CHLORIDE
17.77	394370	52.7	1054	10.54	TRANS 1,2-DCE
19.71	398089	53.5	1071	10.71	1,1-DCA
21.22	528	0.0	0	0.00	
22.00	182308	49.0	979	9.79	2,2-DCPA
22.21	565559	58.5	1170	11.70*	CIS 1,2-DCE
22.83	543661	55.8	1116	11.16	CHLOROFORM
23.48	270623	53.3	1065	10.65	BCM
24.35	468442	56.6	1131	11.31	1,1,1-TCA
24.96	300279	53.5	1069	10.69	1,1-DCPE
25.30	536268	54.5	1091	10.91	CARBON TET
25.94	340576	51.9	1037	10.37	1,2-DCA
26.76	12234	0.0	0	0.00	
27.01	41848	51.5	1029	10.29	2-CL ETH VI ETH
28.21	471618	56.3	1125	11.25	TCE
28.87	374998	53.9	1078	10.78	1,2-DCPA
29.74	243102	42.7	854	8.54	BRDCLMETHANE
29.92	188152	48.5	971	9.71	DIBROMOMETHANE
30.84	1756	0.0	0	0.00	
31.70	283795	50.6	1012	10.12	CIS 1,3-DCPE
33.48	229429	49.0	979	9.79	TRANS 1,3-DCPE
34.04	300729	47.8	956	9.56	1,1,2-TCA
34.96	198807	45.0	901	9.01	1,3-DCPA
35.17	487135	52.0	1039	10.39	PCE
35.92	196212	48.8	976	9.76	DIBRCLMETHANE
36.66	114353	49.0	981	9.81	1,2-DBEA(EDB)
37.62	289574	525.6	10512	105.12	1CL4FBZ(SURR)
38.17	110116	53.9	1077	10.77	CHLOROBENZENE
38.32	529268	52.6	1052	10.52	1,1,1,2-PCA
39.01	599261	5.0	100	1.00	1CL2FBZ(IS)
41.65	107099	51.6	1032	10.32	BROMOFORM
42.21	195487	52.3	1045	10.45	1,1,2,2-PCA
42.77	140894	50.2	1004	10.04	1,2,3-TCPA
43.26	101693	52.6	1052	10.52	BROMOBENZENE
43.76	130225	52.4	1049	10.49	2-CL TOLUENE
43.93	181791	56.5	1131	11.31	4-CL TOLUENE
44.84	624	0.0	0	0.00	
45.27	4543	0.0	0	0.00	
46.71	227733	51.0	1020	10.20	1,3-DCB
47.12	262724	53.5	1070	10.70	1,4-DCB
48.50	220000	50.9	1018	10.18	1,2-DCB

Curve Contamination

See OOC

xw
" Jun 96

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Continued...

File .. : c:\ezchrom\voatemp\360608.01
 Method : c:\ezchrom\voatemp\3voa0603.met
 Sample ID : CTL VOA 9
 Acquired : Jun 08, 1996 18:38:59
 Printed : Jun 10, 1996 08:47:36

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
51.43	29929	49.1	981	9.81	1,2-DBr-3-CPA
54.16	1770	0.0	0	0.00	
54.44	203679	45.8	916	9.16	1,2,4-TCB
54.87	361543	49.2	983	9.83	HEXACLBUTADIENE
56.13	190244	46.5	930	9.30	1,2,3-TCB

* CHK IS OK

** Out of $\pm 15\%$ criteria

*** Lab contamination. OOC Form required.
 incurre

zw

" Jun 96

AB 11 Jun 96

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.16
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 5048s 16
 Acquired : Jun 06, 1996 08:12:11
 Printed : Jun 06, 1996 09:56:01

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.51	7632	0.0	0	0.00	
13.64	2834	0.0	0	0.00	
17.94	1619	0.0	0	0.00	
22.19	1568	2.3	46	0.46 <i>ML</i>	Cis 1,2-dce
26.74	667050	5.0	100	1.00	Flbenzene (IS)
28.20	1818	0.9	18	0.18	Tce
37.62	488195	944.8	18896	188.96	1cl4fbz (surr) <i>94% ✓✓</i>
38.61	2097	0.0	0	0.00	M/P Xylene
39.00	636934	5.0	100	1.00	1cl2flbz (IS)
40.39	6114	4.9	98	0.98 <i>NM</i>	Styrene
42.50	340741	0.0	0	0.00	
43.05	1672	4.0	80	0.80 <i>ML</i>	n-propylbenzene
43.72	3620	8.3	166	1.66 <i>NM</i>	1,3,5-tmb/2-cl tol
43.95	3917	5.2	103	1.03 <i>NC</i>	4-cl toluene
45.14	2095	0.0	0	0.00	1,2,4-tmb
47.10	8418	4.3	87	0.87 <i>NC</i>	1,4-dcb
47.87	1743	2.0	39	0.39 <i>ML</i>	n-butylbenzene
48.50	2676	2.6	52	0.52 <i>NC</i>	1,2-dcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.16
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 5048s 16
 Acquired : Jun 06, 1996 08:12:11
 Printed : Jun 06, 1996 09:56:01

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.18	3358	0.0	0	0.00	
5.87	4844	4.2	84	0.84	DCDFM
6.09	492	0.0	0	0.00	
6.91	3542	0.0	0	0.00	CHLOROMETHANE
7.51	22514	0.0	0	0.00	
7.75	7728	0.0	0	0.00	
7.99	11063	0.0	0	0.00	
16.48	111988	0.0	0	0.00	METH CHLORIDE
22.22	2735	0.0	0	0.00	CIS 1,2-DCE
22.82	741	0.0	0	0.00	CHLOROFORM
26.78	10865	17.2	345	3.45	2-CL ETH VI ETH FB
28.22	3252	0.0	0	0.00	TCE
28.90	1375	0.0	0	0.00	1,2-DCPA
35.21	789	0.0	0	0.00	PCE
36.74	540	3.9	77	0.77	1,2-DBEA (EDB)
37.64	506223	1011.0	20221	202.21	1CL4FBZ (SURRE) 101% ✓
38.16	548	0.0	0	0.00	CHLOROBENZENE
39.03	547274	5.0	100	1.00	1CL2FBZ (IS)
42.54	176734	0.0	0	0.00	
43.76	449	3.0	60	0.60	2-CL TOLUENE
43.93	891	0.7	13	0.13	4-CL TOLUENE
46.72	1533	1.5	30	0.30	1,3-DCB
47.14	1428	1.1	23	0.23	1,4-DCB
48.53	2522	2.0	40	0.40	1,2-DCB
51.37	311	13.5	269	2.69	1,2-DBr-3-CPA
51.93	1124	0.0	0	0.00	
53.23	564	0.0	0	0.00	
54.49	675	0.7	13	0.13	1,2,4-TCB
54.94	2483	0.0	0	0.00	HEXACLBUTADIENE
55.31	544	0.0	0	0.00	
56.20	1310	1.1	22	0.22	1,2,3-TCB
56.56	595	0.0	0	0.00	

62 * ✓

162
 17 JUN 96
 17 JUN 96

calculated ag. etc
 OOC generated
 15 JUN 96

NC
 2mL
 NM

* Suspected background tab contamination.
 ES added twice inadvertently
 so divided by 2.
 UI 11 Jun 96

4/17 Jun 96

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.5 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:15

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.16	568	0.0	0	0.00	
5.92	1915	2.5	50	0.50	DCDFM 0.0036 ar ✓
6.86	7622	2.5	50	0.50	CHLOROMETHANE
7.31	13727	2.5	50	0.50	VINYL CHLORIDE
7.50	5109	0.0	0	0.00	
7.90	431	0.0	0	0.00	
9.24	1547	2.5	50	0.50	BROMOMETHANE
9.63	9642	2.5	50	0.50	CHLOROETHANE
10.14	631	0.0	0	0.00	
10.31	705	0.0	0	0.00	
10.80	11985	2.5	50	0.50	TCFM
13.13	7505	2.5	50	0.50	FREON 113
13.99	11189	2.5	50	0.50	1,1-DCE
16.43	458209	2.5	50	0.50	METH CHLORIDE
17.71	10455	2.5	50	0.50	TRANS 1,2-DCE
19.65	11399	2.5	50	0.50	1,1-DCA
21.97	5324	2.5	50	0.50	2,2-DCPA
22.18	17492	2.5	50	0.50	CIS 1,2-DCE
22.79	19822	2.5	50	0.50	CHLOROFORM
23.43	4951	2.5	50	0.50	BCM
24.33	15221	2.5	50	0.50	1,1,1-TCA
24.95	10133	2.5	50	0.50	1,1-DCPE
25.30	16249	2.5	50	0.50	CARBON TET
25.92	10232	2.5	50	0.50	1,2-DCA
26.76	12533	0.0	0	0.00	
28.20	21555	2.5	50	0.50	TCE 0.0406 ar ✓
28.88	12306	2.5	50	0.50	1,2-DCPA
29.71	6905	2.5	50	0.50	BRODICHMETHANE
29.93	2736	2.5	50	0.50	DIBROMOMETHANE
31.68	8942	2.5	50	0.50	CIS 1,3-DCPE
33.47	7061	2.5	50	0.50	TRANS 1,3-DCPE
34.04	9447	2.5	50	0.50	1,1,2-TCA
34.96	6711	2.5	50	0.50	1,3-DCPA
35.16	16863	2.5	50	0.50	PCE
35.93	2554	2.5	50	0.50	DIBRODICHMETHANE
36.67	1168	2.5	50	0.50	1,2-DBEA (EDB)
37.62	9872	25.0	500	5.00	1,1,1,2,2-PCE
38.16	2870	2.5	50	0.50	CHLOROBENZENE
38.32	16972	2.5	50	0.50	1,1,1,2-PCA
38.32	531037	5.0	100	1.00	1,1,1,2,2-PCE
41.68	309	2.5	50	0.50	BROMOFORM
42.25	6576	2.5	50	0.50	1,1,2,2-PCA
42.79	4369	2.5	50	0.50	1,2,3-TCPA
43.33	522	2.5	50	0.50	BROMOBENZENE
43.77	4146	2.5	50	0.50	2-CL TOLUENE

Continued...

① 05JUN96 LT

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 05 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:15

Channel B Results

RT(min)	pK Area	ng	Scil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
43.96	4847	2.5	50	0.50	4-CL TOLUENE
46.72	6071	2.5	50	0.50	1,3-DCB
47.13	6917	2.5	50	0.50	1,4-DCB
47.55	367	0.0	0	0.00	
48.51	7102	2.5	50	0.50	1,2-DCB 0.034 $\mu\text{g}/\text{l}$ ✓
54.46	6367	2.5	50	0.50	1,2,4-TCB
54.89	14768	2.5	50	0.50	HEXACHLOROCYCLOHEPTADIENE
55.62	583	0.0	0	0.00	
56.14	5406	2.5	50	0.50	1,2,3-TCB

* 05 Jun 96 U
 05 Jun 96 U

McKenzie Laboratories - EPA GC Volatiles
 File : c:\ezchrom\chrom\360605.17
 Method : c:\ezchrom\chrom\3voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 06, 1996 10:51:46
 Printed : Jun 06, 1996 16:47:59

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.11	703	0.0	0	0.00	
5.80	358703	54.4	1088	10.88	DCDFM
6.56	204632	36.1	723	7.23 * *	CHLOROMETHANE
6.93	437943	48.9	979	9.79	VINYL CHLORIDE
8.05	4869	0.0	0	0.00	
8.56	119218	35.5	711	7.11 *	BROMOMETHANE
8.85	469688	48.6	973	9.73	CHLOROETHANE
9.80	573224	46.5	929	9.29	TCFM
10.67	9880	0.0	0	0.00	
11.76	326804	49.1	982	9.82	FREON 113
12.58	499579	45.5	910	9.10	1,1-DCE
13.46	61984	0.0	0	0.00	
15.06	804737	4.3	86	0.86 10.3	METH CHLORIDE <i>calculated as CTC</i>
15.99	5525	0.0	0	0.00	
16.41	492425	46.6	931	9.31	TRANS 1,2-DCE
18.42	514505	49.1	981	9.81	1,1-DCA
19.26	1418	0.0	0	0.00	
19.55	489	0.0	0	0.00	
20.86	179653	34.7	694	6.94 * *	2,2-DCPA
21.08	667891	48.7	974	9.74	CIS 1,2-DCE
21.74	670113	48.6	973	9.73	CHLOROFORM
22.42	287760	40.3	807	8.07 *	BCM
23.36	603651	51.7	1033	10.33	1,1,1-TCA
23.97	421482	53.2	1065	10.65	1,1-DCPE
24.33	681471	49.2	984	9.84	CARBON TET
25.01	465807	50.3	1006	10.06	1,2-DCA
25.88	22359	0.0	0	0.00	
26.10	51929	45.4	909	9.09	2-CL ETH VI ETH
26.99	2138	0.0	0	0.00	
27.40	619683	52.3	1047	10.47	TCE
28.09	483950	49.3	986	9.86	1,2-DCPA
28.97	361365	44.9	898	8.98	BRDICLMETHANE
29.18	215536	39.9	797	7.97 *	DIBROMOMETHANE
30.17	785	0.0	0	0.00	
31.02	387397	49.0	980	9.80	CIS 1,3-DCPE
31.75	998	0.0	0	0.00	
32.07	491	0.0	0	0.00	
32.87	321694	48.7	974	9.74	TRANS 1,3-DCPE
33.46	456543	51.4	1027	10.27	1,1,2-TCA
34.09	527	0.0	0	0.00	
34.38	323036	51.7	1035	10.35	1,3-DCPA
34.60	691341	52.3	1047	10.47	PCE
35.36	238400	42.3	847	8.47	DIBRCLMETHANE
36.12	131633	40.7	814	8.14 *	1,2-DBEA (EDB)
36.50	949	0.0	0	0.00	

Continued...

file : c:\ezchrom\chrom\360605.17
 method : c:\ezchrom\chrom\3voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 06, 1996 10:51:46
 Printed : Jun 06, 1996 16:47:59

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
37.10	404146	520.4	10408	104.08	1CL4FBZ (SURR) 104 /
37.66	147034	51.0	1019	10.19	CHLORO BENZENE
37.80	734832	51.8	1036	10.36	1,1,1,2-PCA
38.51	844658	5.0	100	1.00	1CL2FBZ (IS)
41.18	118802	41.7	835	8.35 *	BROMOFORM
41.75	284319	53.9	1078	10.78	1,1,2,2-PCA
42.32	211060	53.3	1066	10.66	1,2,3-TCFA
42.80	108336	40.9	819	8.19 *	BROMO BENZENE
43.30	181492	51.9	1037	10.37	2-CL TOLUENE
43.47	234811	51.8	1037	10.37	4-CL TOLUENE
44.80	11809	0.0	0	0.00	
45.64	582	0.0	0	0.00	
46.26	334202	53.0	1061	10.61	1,3-DCB
46.67	351507	50.8	1017	10.17	1,4-DCB
47.19	1683	0.0	0	0.00	
47.33	2033	0.0	0	0.00	
47.66	723	0.0	0	0.00	
48.05	336333	55.1	1102	11.02	1,2-DCB
48.89	1671	0.0	0	0.00	
49.29	1195	0.0	0	0.00	
49.75	649	0.0	0	0.00	
50.29	1077	0.0	0	0.00	
51.06	30101	38.7	775	7.75 *	1,2-DBT-3-CPA
51.59	2209	0.0	0	0.00	
51.90	918	0.0	0	0.00	
52.75	2434	0.0	0	0.00	
53.20	1044	0.0	0	0.00	
53.34	1357	0.0	0	0.00	
53.83	2803	0.0	0	0.00	
54.10	377089	60.0	1200	12.00 *	1,2,4-TCB
54.55	591168	57.2	1143	11.43	HEXACL BUTADIENE
55.25	1467	0.0	0	0.00	
55.79	329601	57.0	1140	11.40	1,2,3-TCB

* OK in CTL VOA
 ** Out of criteria not reported in samples.

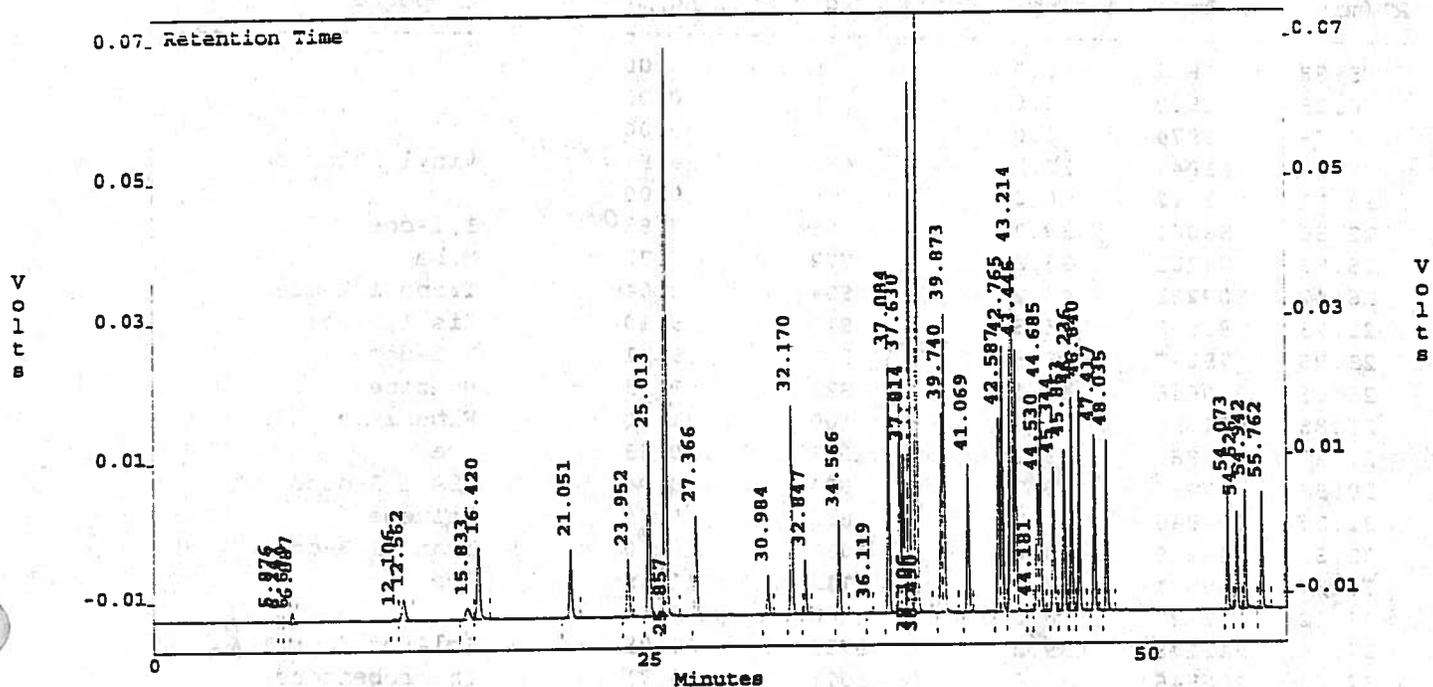
UI 11 Jun 96

Alt 7 Jun 96

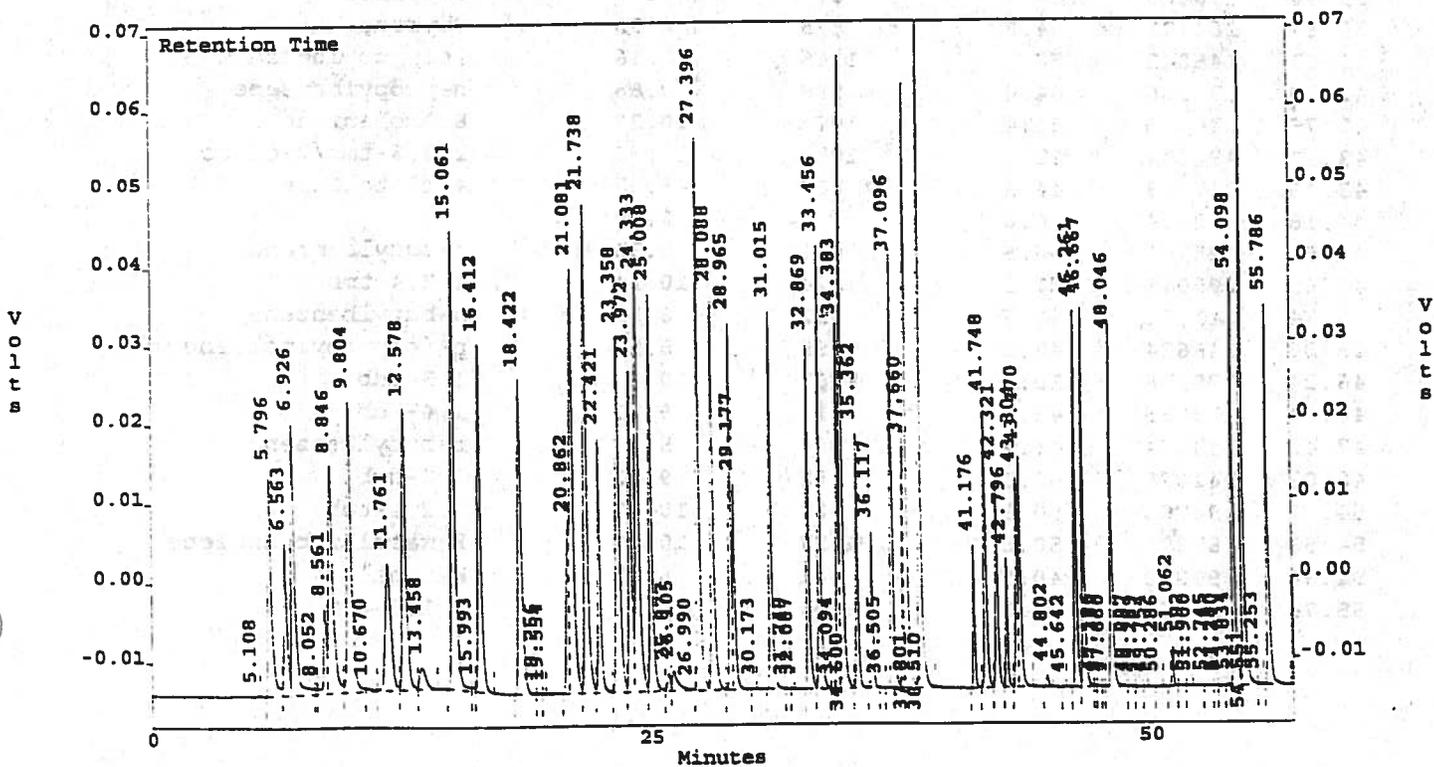
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.17
 Method : c:\ezchrom\chrom\3voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 06, 1996 10:51:46
 Printed : Jun 06, 1996 16:47:56

c:\ezchrom\chrom\360605.17 -- Channel A



c:\ezchrom\chrom\360605.17 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.17
 Method : c:\ezchrom\chrom\3voa0606.met
 Sample ID : CHK VOA 1
 Acquired : Jun 06, 1996 10:51:46
 Printed : Jun 06, 1996 16:47:58

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
5.88	1827	0.0	0	0.00	
6.25	1500	0.0	0	0.00	
6.68	3974	0.0	0	0.00	
6.89	11847	32.5	651	6.51 <i>OK-H</i>	Vinyl Chloride
12.11	3742	0.0	0	0.00	
12.56	38061	39.3	785	7.85 <i>OK-H</i>	1,1-dce
15.83	29201	38.6	772	7.72 *	Mtbe
16.42	107283	45.2	904	9.04	Trans 1,2-dce
21.05	89455	45.5	910	9.10	Cis 1,2-dce
23.95	75277	46.5	931	9.31	1,1-dcpe
25.01	210648	46.1	923	9.23	Benzene
25.86	651912	5.0	100	1.00	Flbenzene (IS)
27.37	110981	53.2	1063	10.63	Tce
30.98	37937	49.7	994	9.94	Cis 1,3-dcpe
32.17	204846	42.7	854	8.54	Toluene
32.85	47488	53.0	1060	10.60	Trans 1,3-dcpe
34.57	95591	57.5	1149	11.49	Pce
36.12	1729	0.0	0	0.00	
37.08	213178	439.2	8785	87.85	1cl4fbz (surr) <i>PF /</i>
37.63	206546	53.6	1071	10.71	Chlorobenzene
37.81	163557	54.1	1083	10.83	Ethylbenzene
38.11	497889	107.6	2152	21.52	M/P Xylene
38.49	632237	5.0	100	1.00	1cl2flbz (IS)
39.74	176426	43.7	874	8.74	O Xylene
39.87	264121	44.8	895	8.95	Styrene
41.07	145042	57.3	1146	11.46	Isopropylbenzene
42.59	170386	44.4	888	8.88	n-propylbenzene
42.76	226735	51.4	1028	10.28	Bromobenzene
43.21	497384	92.6	1853	18.53	1,3,5-tmb/2-cl tol
43.45	217303	44.3	887	8.87	4-cl toluene
44.18	2414	0.0	0	0.00	
44.53	125791	46.6	931	9.31	t-butylbenzene
44.69	205046	51.2	1024	10.24	1,2,4-tmb
45.34	141770	42.6	852	8.52	s-butylbenzene
45.86	146624	42.9	859	8.59	p-isopropyltoluene
46.24	178376	50.2	1003	10.03	1,3-dcb
46.64	175055	45.6	911	9.11	1,4-dcb
47.42	153274	45.2	904	9.04	n-butylbenzene
48.03	142025	49.1	982	9.82	1,2-dcb
54.07	94760	50.3	1007	10.07	1,2,4-tcb
54.53	87225	50.8	1017	10.17	Hexachlorobutadiene
54.94	91070	40.0	801	8.01	Napthalene
55.76	92668	54.7	1094	10.94	1,2,3-tcb

File : c:\ezchrom\chrom\360605.18
 Method : c:\ezchrom\chrom\3voa0606.met
 Sample ID : 2.0 ppb 2
 Acquired : Jun 06, 1996 12:15:11
 Printed : Jun 06, 1996 16:54:21

Channel B Results

RT(min)	pK Area	ng	Soil ($\mu\text{g}/\text{kg}$)	Soln ($\mu\text{g}/\text{l}$)	Compound
38.54	787892	5.0	100	1.00	1,1,2,2-PCB (IS)
39.03	2048	0.0	0	0.00	
39.26	836	0.0	0	0.00	
41.23	17469	11.1	221	2.21	BROMOFORM
41.81	82812	17.1	343	3.43 *	1,1,2,2-PCA
42.36	60991	17.0	339	3.39 *	1,2,3-TCPA
42.86	9583	8.3	167	1.67	BROMOBENZENE
43.33	33342	12.5	249	2.49 *	2-CL TOLUENE
43.51	36509	8.9	179	1.79	4-CL TOLUENE
44.84	1457	0.0	0	0.00	
45.70	388	0.0	0	0.00	
46.32	60673	11.2	224	2.24	1,3-DCB
46.72	64140	10.6	212	2.12	1,4-DCB
48.13	65533	12.6	252	2.52 *	1,2-DCB
48.82	1521	0.0	0	0.00	
49.10	833	0.0	0	0.00	
51.07	6817	19.3	386	3.86 *	1,2-DBr-3-CPA
51.94	422	0.0	0	0.00	
52.17	446	0.0	0	0.00	
53.85	1452	0.0	0	0.00	
54.14	59421	10.5	211	2.11	1,2,4-TCB
54.58	104356	10.1	202	2.02	HEXAChLButADIENE
55.18	1298	0.0	0	0.00	
55.37	1340	0.0	0	0.00	
55.82	62169	12.1	242	2.42	1,2,3-TCB
56.37	1252	0.0	0	0.00	
56.66	395	0.0	0	0.00	

* Out of $\pm 20\%$ range.
 Not in 502.15
 UI 11 Jun 96 not reported today.

AG 17 Jun 96

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.18
 Method : c:\ezchrom\chrom\3voa0606.met
 Sample ID : 2.0 ppb 2
 Acquired : Jun 06, 1996 12:15:11
 Printed : Jun 06, 1996 16:54:21

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.13	8252	0.0	0	0.00	
5.85	30992	7.8	155	1.55	DCDFM
6.51	12031	0.0	0	0.00	
6.62	16632	1.3	27	0.27 *	CHLOROMETHANE
6.80	7123	0.0	0	0.00	
6.99	92135	10.3	206	2.06	VINYL CHLORIDE
8.61	1822	3.8	77	0.77	BROMOMETHANE
8.95	54592	6.6	133	1.33 *	CHLOROETHANE
9.85	73026	7.7	153	1.53 *	TCFM
10.02	3746	0.0	0	0.00	
11.85	52529	9.4	188	1.88	FREON 113
12.66	48722	6.4	129	1.29 *	1,1-DCE
12.98	1551	0.0	0	0.00	
13.24	3789	0.0	0	0.00	
15.15	289518	0.0	0	0.00	METH CHLORIDE
16.51	77465	6.9	138	1.38 *	TRANS 1,2-DCE
18.49	82500	8.3	167	1.67	1,1-DCA
19.31	726	0.0	0	0.00	
20.94	30280	7.5	151	1.51 *	2,2-DCPA
21.14	114859	7.4	148	1.48 <i>OK-PID</i>	CIS 1,2-DCE
21.80	128513	8.9	177	1.77	CHLOROFORM
22.48	44763	7.3	145	1.45 *	BCM
22.84	667	0.0	0	0.00	
23.40	107441	9.3	186	1.86	1,1,1-TCA
24.04	69460	9.6	192	1.92	1,1-DCPE
24.40	110905	8.6	171	1.71	CARBON TET
25.07	94464	11.1	222	2.22	1,2-DCA
25.93	25502	25.4	508	5.08 *	2-CL ETH VI ETH
27.43	107587	8.5	169	1.69	TCE
28.13	91458	9.5	189	1.89	1,2-DCPA
29.01	60838	9.6	193	1.93	BRDCLMETHANE
29.22	23350	6.6	131	1.31 *	DIBROMOMETHANE
30.19	4266	0.0	0	0.00	
31.05	66073	8.8	175	1.75	CIS 1,3-DCPE
31.41	1042	0.0	0	0.00	
32.91	61320	10.3	206	2.06	TRANS 1,3-DCPE
33.47	103915	13.7	275	2.75 *	1,1,2-TCA
34.42	76563	14.0	279	2.79 *	1,3-DCPA
34.62	125879	9.7	194	1.94	PCE
35.40	45701	10.3	207	2.07	DIBRCLMETHANE
36.16	27694	12.0	240	2.40	1,2-DBEA (EDB)
36.45	449	0.0	0	0.00	
37.14	77047	102.1	2042	20.42	1CL4FBZ (SURR)
37.68	30100	10.1	203	2.03	CHLOROBENZENE
37.84	142671	10.0	200	2.00	1,1,1,2-PCA

Continued...

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McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.15
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 5047s 15
 Acquired : Jun 06, 1996 06:59:09
 Printed : Jun 06, 1996 09:55:48

Channel B Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
0.36	687	0.0	0	0.00	
5.22	3868	0.0	0	0.00	
5.90	4689	4.1	81	0.81	DCDFM
6.90	899	0.0	0	0.00	CHLOROMETHANE
7.35	14778	1.4	29	0.29	VINYL CHLORIDE
7.76	6125	0.0	0	0.00	
7.95	10091	0.0	0	0.00	
8.10	3243	0.0	0	0.00	
16.46	120562	10.5	169	2.16	METH CHLORIDE
22.20	1217	0.0	0	0.00	CIS 1,2-DCE
22.85	860	0.0	0	0.00	CHLOROFORM
26.78	10751	0.0	0	0.00	
28.21	3006	0.0	0	0.00	TCE
28.90	1329	0.0	0	0.00	1,2-DCPA
35.19	631	0.0	0	0.00	PCE
36.73	670	3.9	78	0.78	1,2-DBEA (EDB)
37.64	536104	974.1	19481	194.81	1CL4FBZ (SURR)
38.14	1313	0.0	0	0.00	CHLOROBENZENE
39.03	601450	5.0	100	1.00	1CL2FBZ (IS)
43.95	510	0.5	10	0.10	4-CL TOLUENE
46.74	697	1.3	25	0.25	1,3-DCB
47.14	839	1.0	20	0.20	1,4-DCB
48.51	1956	1.8	37	0.37	1,2-DCB
54.48	463	0.6	12	0.12	1,2,4-TCB
54.92	1676	0.0	0	0.00	HEXACLUBUTADIENE
56.21	929	1.0	19	0.19	1,2,3-TCB

calculated as of
 000 generated
 15 Jun 96 UI

97.1. ✓

* Suspected background
 Lab contamination.
 17 Jun 96 UI 11 Jun 96

All methanol extracts calculated
 as follows:

(20.0 mL methanol) (ng - from instrument)
(0.050 mL) (25.5g)
 Shot on instrument amt. of sample

ES added twice inadvertently so value divided by 2.

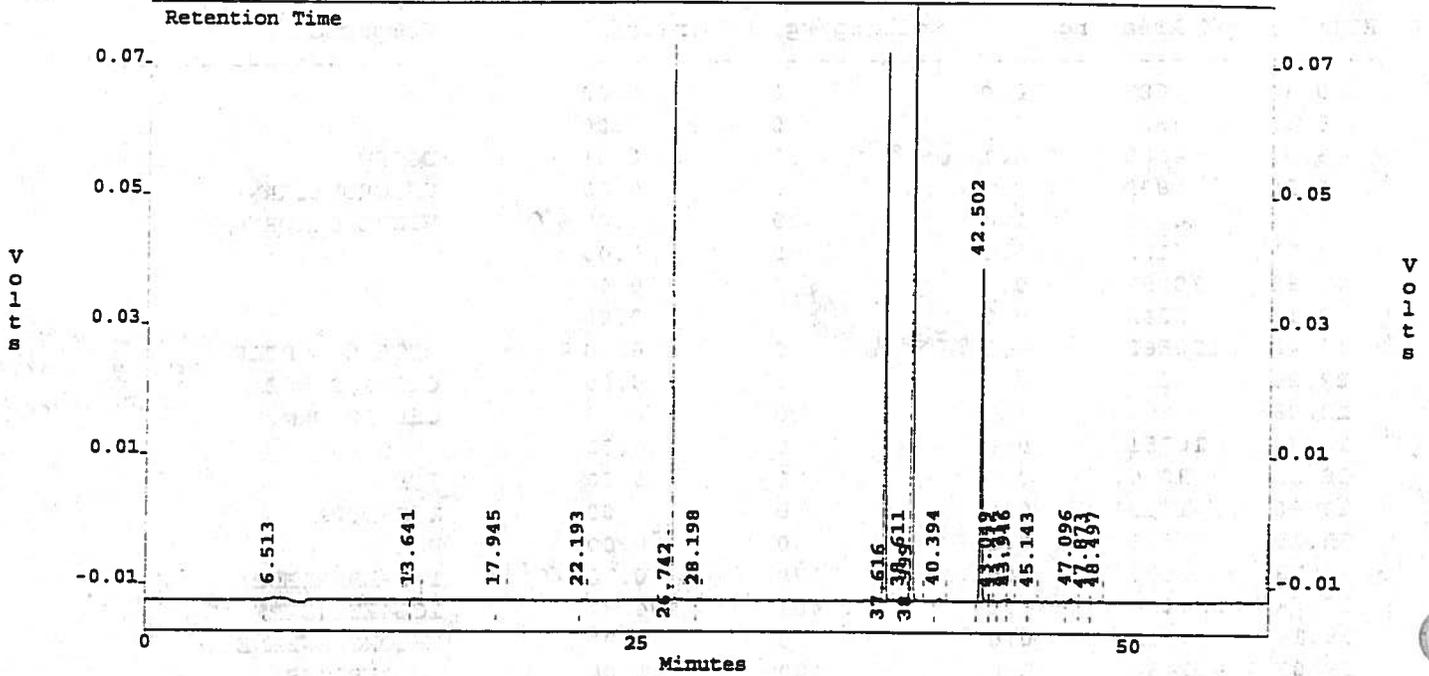
UI 11 Jun 96

17 Jun 96

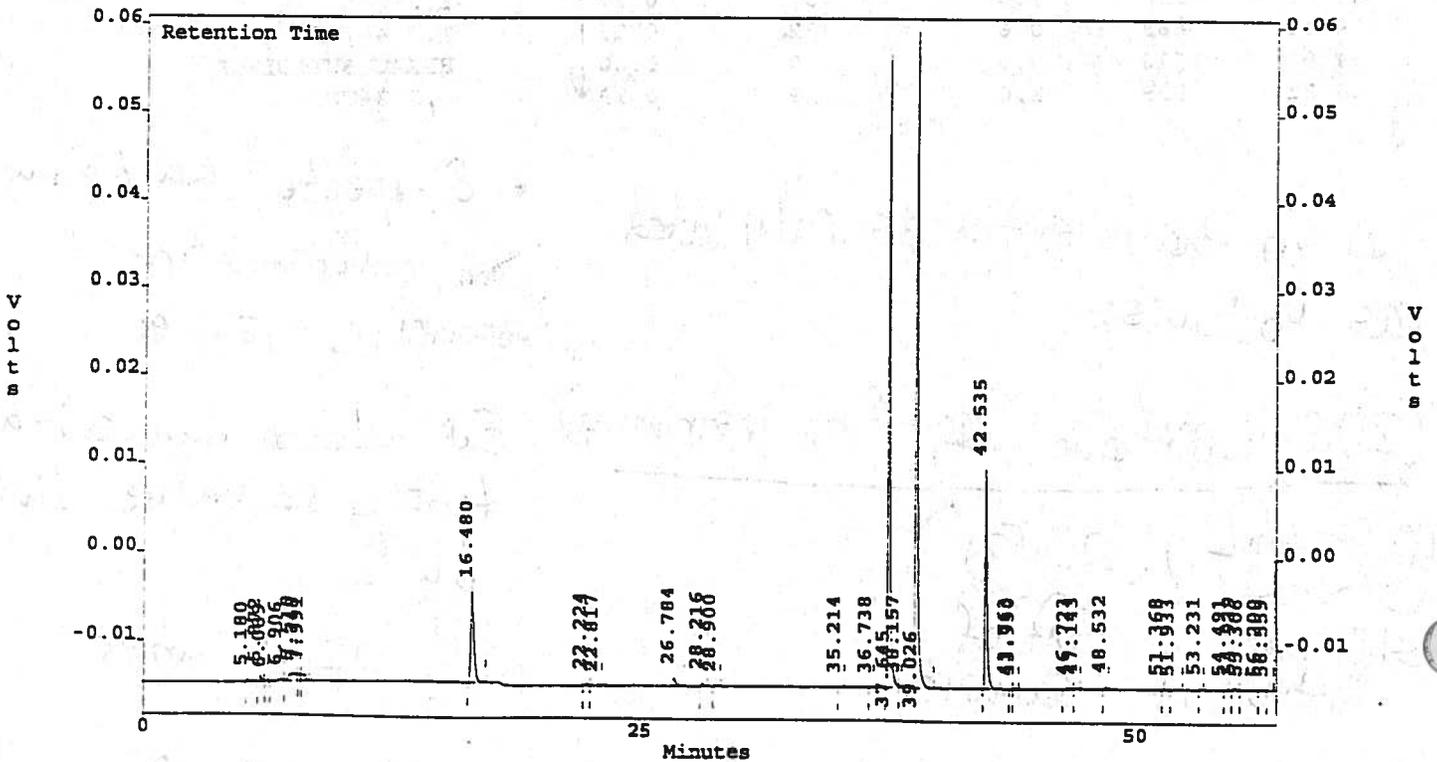
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.16
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 5048s 16
 Acquired : Jun 06, 1996 08:12:11
 Printed : Jun 06, 1996 09:55:59

c:\ezchrom\chrom\360605.16 -- Channel A



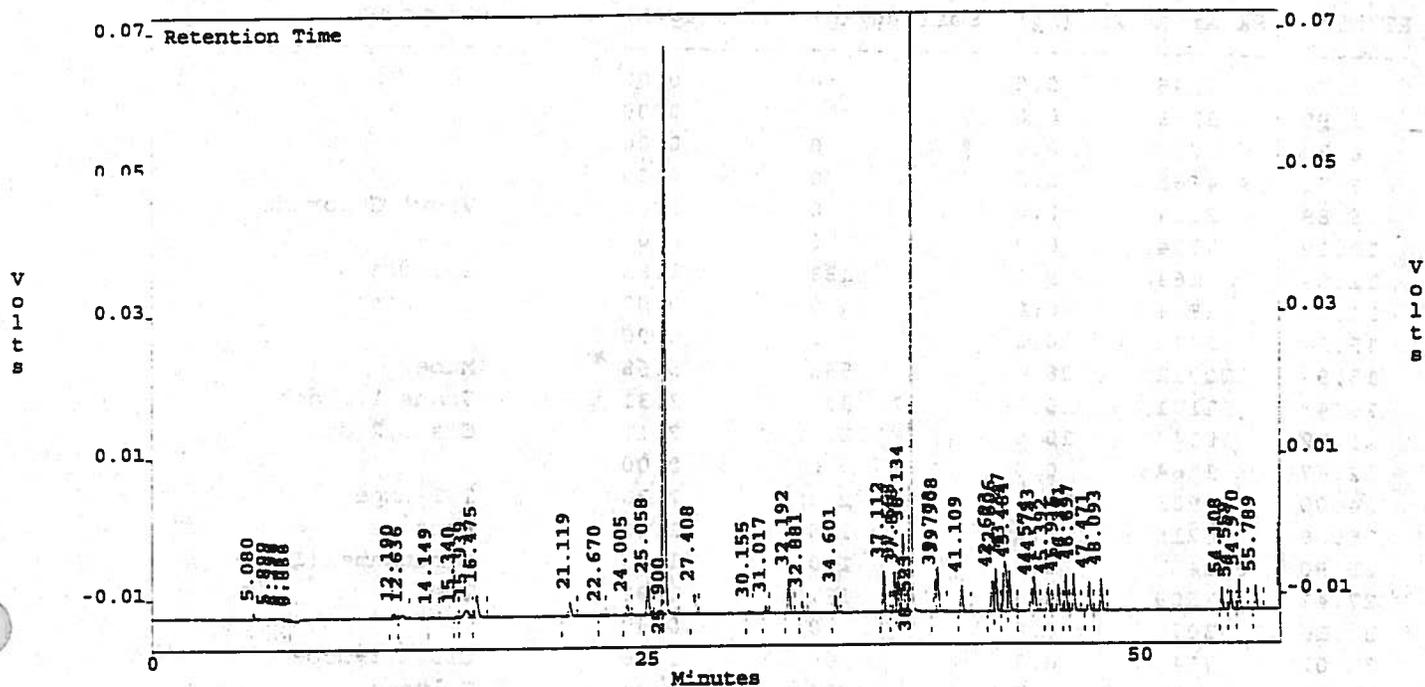
c:\ezchrom\chrom\360605.16 -- Channel B



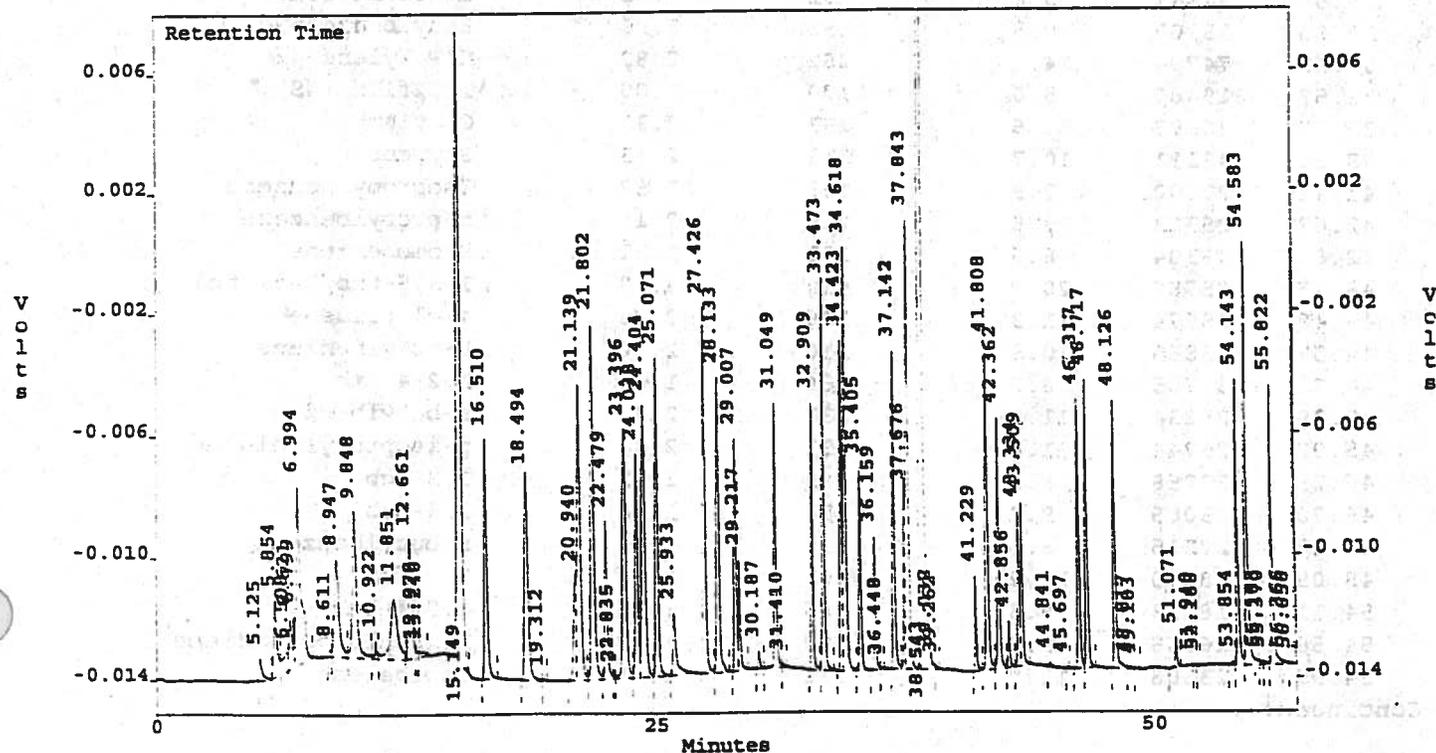
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.18
 Method : c:\ezchrom\chrom\3voa0606.met
 Sample ID : 2.0 ppb 2
 Acquired : Jun 06, 1996 12:15:11
 Printed : Jun 06, 1996 16:54:19

c:\ezchrom\chrom\360605.18 -- Channel A



c:\ezchrom\chrom\360605.18 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360605.18
 Method : c:\ezchrom\chrom\3voa0606.met
 Sample ID : 2.0 ppb 2
 Acquired : Jun 06, 1996 12:15:11
 Printed : Jun 06, 1996 16:54:21

Channel A Results

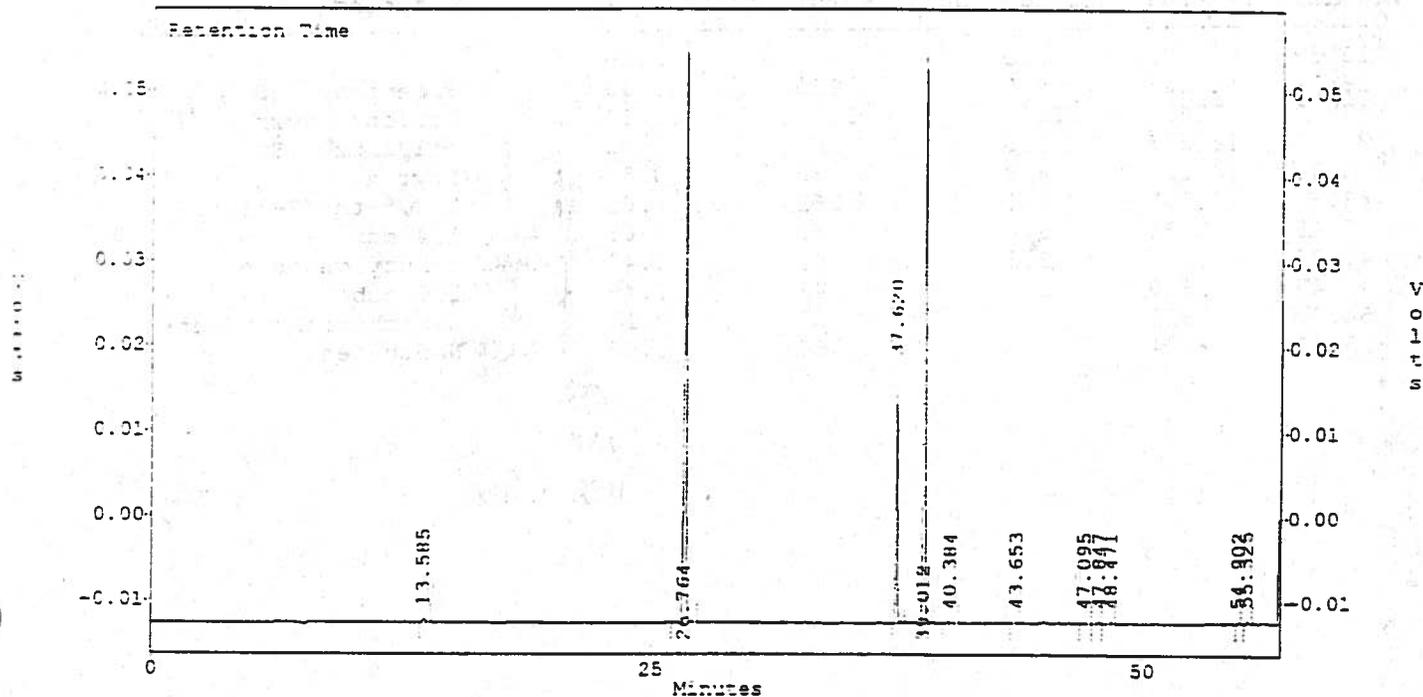
RT(min)	Pk Area	Air(ng)	Soil (µg/kg)	Soln(µg/L)	Compound
5.08	5145	0.0	0	0.00	
5.90	3756	0.0	0	0.00	
6.30	6030	0.0	0	0.00	
6.71	4661	0.0	0	0.00	
6.89	2114	0.0	0	0.00	Vinyl Chloride
12.19	7734	0.0	0	0.00	
12.64	6164	9.1	183	1.83	1,1-dce
14.15	1934	0.0	0	0.00	
15.34	2442	0.0	0	0.00	
15.94	20712	28.4	568	5.68 *	Mtbe
16.48	31101	16.6	331	3.31 *	Trans 1,2-dce
21.12	18142	10.8	217	2.17	Cis 1,2-dce
22.67	1564	0.0	0	0.00	
24.00	12903	11.8	236	2.36	1,1-dcpe
25.06	36215	8.8	176	1.76	Benzene
25.90	643452	5.0	100	1.00	Flbenzene (IS)
27.41	21509	9.6	191	1.91	Tce
30.16	3075	0.0	0	0.00	
31.02	7146	8.3	166	1.66	Cis 1,3-dcpe
32.19	35452	11.7	234	2.34	Toluene
32.88	9965	9.5	189	1.89	Trans 1,3-dcpe
34.60	17445	7.7	153	1.53 <i>ok-H</i>	Pce
37.11	37354	113.2	2263	22.63	1cl4fbz (surr) 113.2/.
37.66	37341	9.6	192	1.92	Chlorobenzene
37.85	33907	9.8	196	1.96	Ethylbenzene
38.13	74704	14.1	282	2.82	M/P Xylene
38.52	619480	5.0	100	1.00	1cl2flbz (IS) *
39.77	30582	11.6	233	2.33	O Xylene
39.91	42291	10.7	213	2.13	Styrene
41.11	27600	7.9	158	1.58	Isopropylbenzene
42.62	29313	10.8	215	2.15	n-propylbenzene
42.81	39304	8.5	171	1.71	Bromobenzene
43.25	75786	20.9	418	4.18	1,3,5-tmb/2-cl tol
43.48	36674	11.3	226	2.26	4-cl toluene
44.57	23865	10.5	210	2.10	t-butylbenzene
44.72	34765	8.2	164	1.64	1,2,4-tmb
45.39	25234	11.9	237	2.37	s-butylbenzene
45.92	25744	11.6	232	2.32	p-isopropyltoluene
46.29	32258	9.1	182	1.82	1,3-dcb
46.70	33085	9.8	196	1.96	1,4-dcb
47.47	27215	9.5	191	1.91	n-butylbenzene
48.09	28670	10.2	203	2.03	1,2-dcb
54.11	18233	9.3	186	1.86	1,2,4-tcb
54.56	16666	9.5	189	1.89	Hexachlorobutadiene
54.97	23588	12.0	241	2.41	Napthalene

Continued...

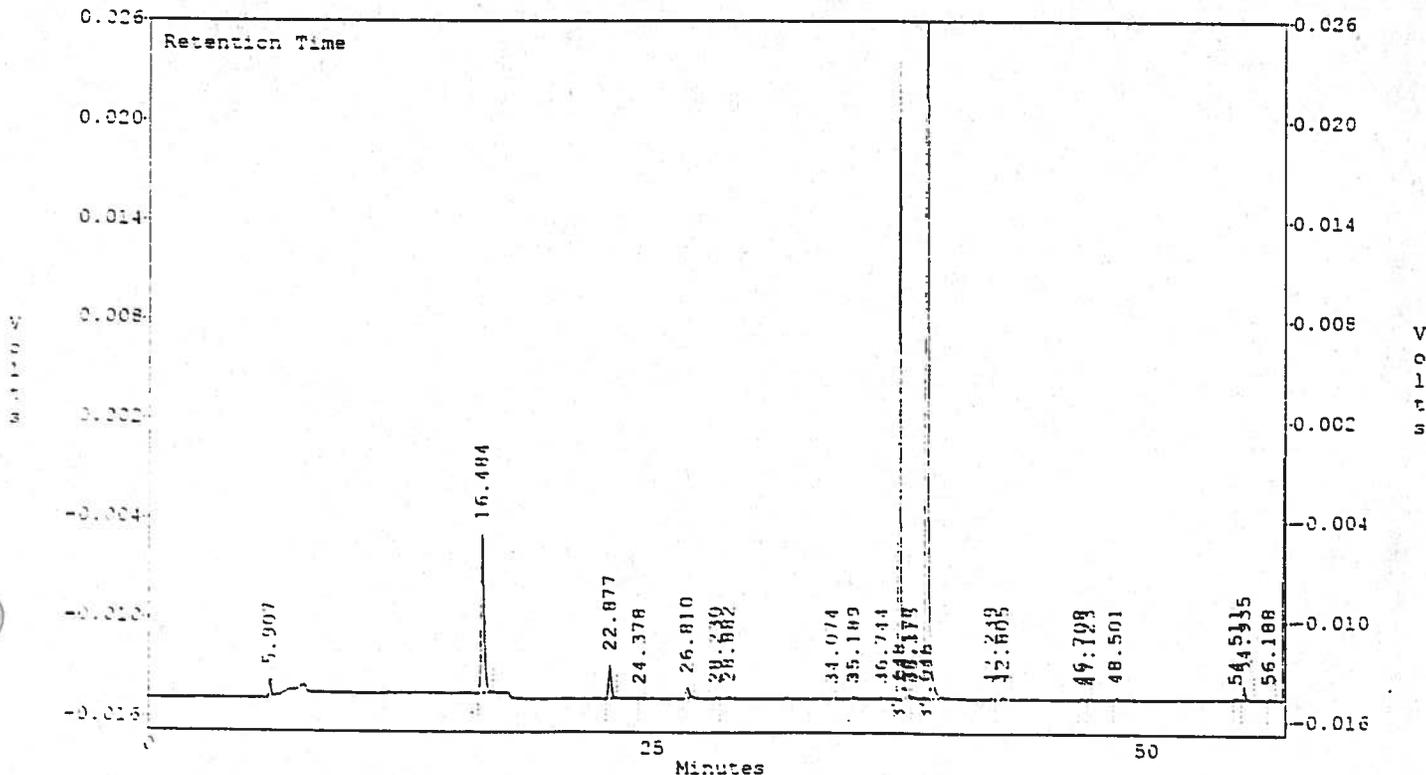
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.02
Method : c:\ezchrom\voatemp\3voa0603.met
Sample ID : MTHD BLK w 10
Acquired : Jun 08, 1996 19:54:41
Printed : Jun 10, 1996 08:47:48

c:\ezchrom\voatemp\360608.02 -- Channel A



c:\ezchrom\voatemp\360608.02 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.02
 Method : c:\ezchrom\voatemp\3voa0603.mec
 Sample ID : MTHD BLK w 10
 Acquired : Jun 08, 1996 19:54:41
 Printed : Jun 10, 1996 08:47:50

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.91	5362	4.2	84	0.84	DCDFM
16.48	104553	0.0	0	0.00	METH CHLORIDE
22.88	18674	0.6	11	0.11	CHLOROFORM
24.38	448	0.0	0	0.00	1,1,1-TCA
26.81	7951	13.2	264	0.00	2-CL ETH VI ETH
28.23	1097	0.0	0	0.00	TCE
28.88	2246	0.0	0	0.00	1,2-DCPA
34.07	460	1.7	34	0.34	1,1,2-TCA
35.19	1089	0.0	0	0.00	PCE
36.74	586	3.9	78	0.78	1,2-DBEA (EDB)
37.65	281992	520.6	10411	104.11	1CL4FBZ (SURRE)
38.18	1040	0.0	0	0.00	CHLOROBENZENE
38.32	438	0.0	0	0.00	1,1,1,2-PCA
39.05	589173	5.0	100	1.00	1CL2FBZ (IS)
42.24	1333	0.8	16	0.16	1,1,2,2-PCA
42.80	1950	1.4	27	0.27	1,2,3-TCPA
46.71	571	1.2	25	0.25	1,3-DCB
47.12	490	0.9	19	0.19	1,4-DCB
48.50	1458	1.7	35	0.35	1,2-DCB
54.51	1402	0.8	16	0.16	1,2,4-TCB
54.94	6752	0.1	2	0.02	HEXACL BUTADIENE
56.19	1346	1.1	22	0.22	1,2,3-TCB

* calc. against CTL VOA.
 see OOC.

XW

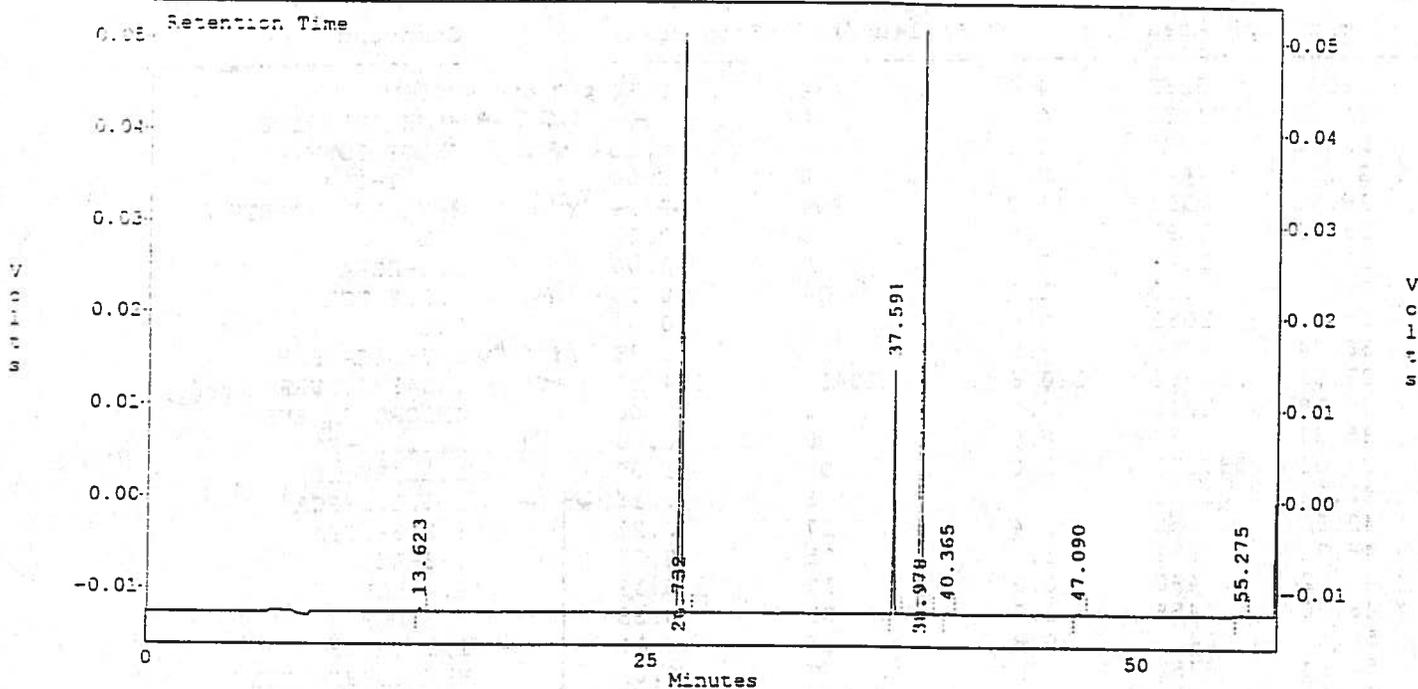
11 Jun 96

AR 13 Jun 96

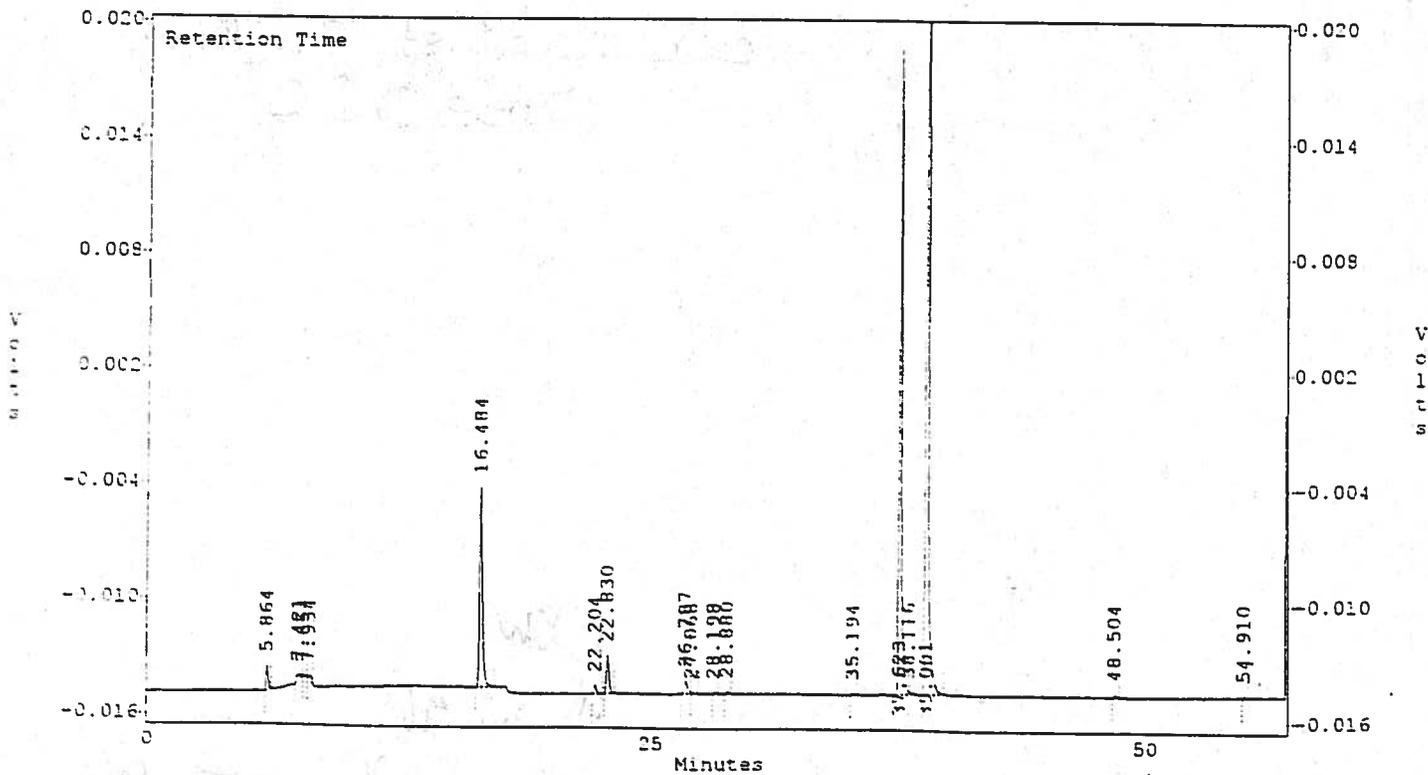
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.03
 Method : c:\ezchrom\voatemp\3voa0603.met
 Sample ID : 5049sR 11
 Acquired : Jun 08, 1996 21:07:41
 Printed : Jun 10, 1996 08:48:01

c:\ezchrom\voatemp\360608.03 -- Channel A



c:\ezchrom\voatemp\360608.03 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\vcatemp\360608.03
Method : c:\ezchrom\vcatemp\3vca0603.met
Sample ID : 5049sP 11
Acquired : Jun 08, 1996 21:07:41
Printed : Jun 10, 1996 08:48:03

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
13.62	4272	0.0	0	0.00	
26.73	476269	5.0	100	1.00	Flbenzene (IS)
37.59	151313	438.7	6775	87.75	1cl4fbz (surr)
38.98	449320	5.0	100	1.00	1cl2flbz (IS)
40.37	2223	4.5	89	0.89	Styrene
47.09	3012	3.5	69	0.69	1,4-dcb
55.27	2613	3.5	70	0.70	Napthalene

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.03
 Method : c:\ezchrom\voatemp\3vca0603.met
 Sample ID : 5049sP 11
 Acquired : Jun 08, 1996 21:07:41
 Printed : Jun 10, 1996 08:48:03

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.86	9032	5.2	52 µg/kg 103	1.03	DCDFM RRT ag. CT
7.42	4390	0.0	0	0.00	VINYL CHLORIDE
7.65	534	0.0	0	0.00	
7.93	2824	0.0	0	0.00	
16.48	113910	0.0	2.3 912 0	0.00 2.45	METH CHLORIDE calc. from CT
22.20	3894	0.0	0	0.00	CIS 1,2-DCE see CCC
22.83	18123	0.7	15	0.15	CHLOROFORM
26.79	8173	0.0	0	0.00	
27.07	687	5.6	112	1.12	2-CL ETH VI ETH
28.20	667	0.0	0	0.00	TCE
28.88	1104	0.0	0	0.00	1,2-DCPA
35.19	552	0.0	0	0.00	PCE
37.62	247280	513.3	10266	102.66	1CL4FBZ (SURR)
38.12	636	0.0	0	0.00	CHLOROBENZENE
39.00	523875	5.0	100	1.00	1CL2FBZ (IS)
48.50	1361	1.7	35	0.35	1,2-DCB
54.91	871	0.0	0	0.00	HEXACL BUTADIENE

Used this run to identify
 and confirm analytes in the
 1st run. This was past
 holding time so not report
 UZ 12 Jun 96

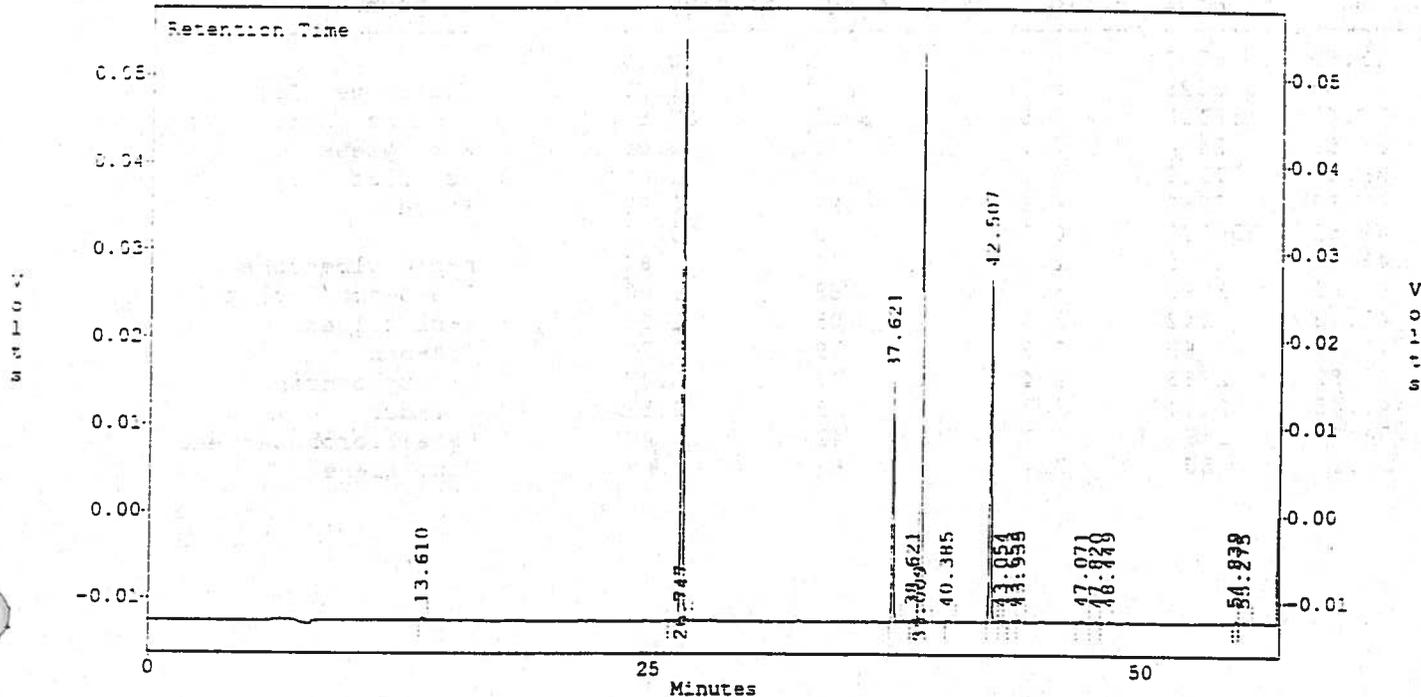
These results noted
 on the report. See OOC.

AE 17 Jun 96

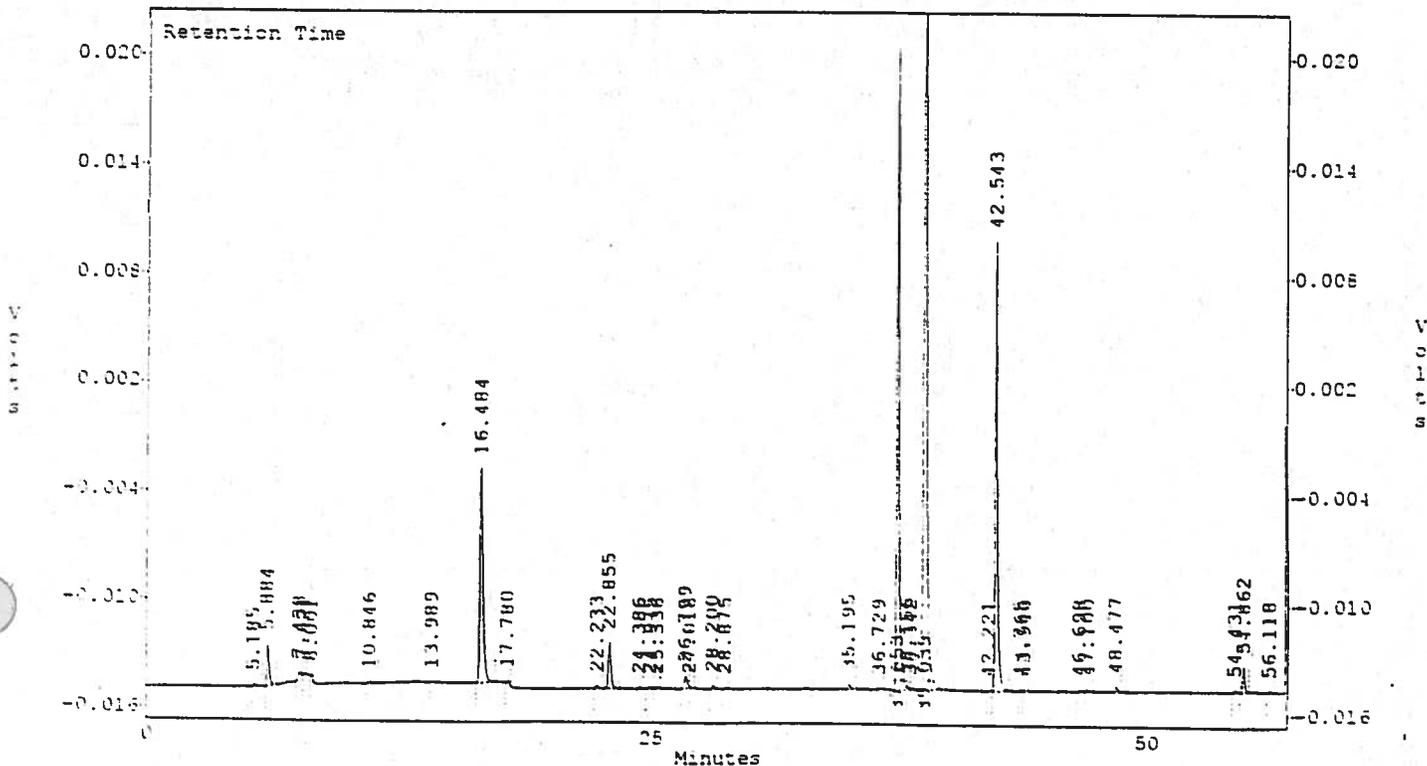
McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.04
 Method : c:\ezchrom\voatemp\3voa0603.met
 Sample ID : 5050sP 12
 Acquired : Jun 08, 1996 22:22:11
 Printed : Jun 10, 1996 08:48:15

c:\ezchrom\voatemp\360608.04 -- Channel A



c:\ezchrom\voatemp\360608.04 -- Channel B



McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.04
 Method : c:\ezchrom\voatemp\3voa0603.met
 Sample ID : 5050sP 12
 Acquired : Jun 08, 1996 22:22:11
 Printed : Jun 10, 1996 08:48:17

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
13.61	3799	0.0	0	0.00	
26.75	503028	5.0	100	1.00	Flbenzene (IS)
37.62	158158	437.5	8750	87.50	1cl4fbz (surr)
38.62	2474	0.0	0	0.00	M/P Xylene
39.01	471120	5.0	100	1.00	1cl2flbz (IS)
40.39	2880	4.6	92	0.92	Styrene
42.51	256502	0.0	0	0.00	
43.05	1845	4.2	84	0.84	n-propylbenzene
43.65	3196	8.4	168	1.68	1,3,5-tmb/2-cl tol
43.93	3242	5.3	105	1.05	4-cl toluene
47.07	4799	3.9	79	0.79	1,4-dcb
47.82	2283	2.4	47	0.47	n-butylbenzene
48.45	2184	2.7	53	0.53	1,2-dcb
54.84	2594	2.1	42	0.42	Hexachlorobutadiene
55.27	2587	3.4	68	0.68	Napthalene

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.04
 Method : c:\ezchrom\voatemp\3vca0603.met
 Sample ID : 5050sP 12
 Acquired : Jun 08, 1996 22:22:11
 Printed : Jun 10, 1996 08:48:17

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Scin (µg/l)	Compound
5.19	1570	0.0	0	0.00	
5.88	17992	7.0	140	1.40	DCDFM <i>RRT ug. CTL</i>
7.44	3235	0.0	0	0.00	VINYL CHLORIDE
7.62	421	0.0	0	0.00	
8.00	1094	0.0	0	0.00	
10.85	1592	1.7	34	0.34	TCFM
13.99	878	2.0	40	0.40	1,1-DCE
16.48	132133	0.0 13.7 <u>256</u>	0	0.00 2.73	METH CHLORIDE <i>calc. from</i>
17.78	1982	0.0	0	0.00	TRANS 1,2-DCE
22.23	1698	0.0	0	0.00	CIS 1,2-DCE
22.86	25046	1.5	29	0.29	CHLOROFORM
24.39	776	0.0	0	0.00	1,1,1-TCA
24.97	970	0.4	8	0.08	1,1-DCPE
25.34	894	0.1	2	0.02	CARBON TET
26.80	8006	0.0	0	0.00	
27.02	573	5.4	109	1.09	2-CL ETH VI ETH
28.20	1736	0.0	0	0.00	TCE
28.88	1098	0.0	0	0.00	1,2-DCPA
35.20	2422	0.0	0	0.00	PCE
36.73	490	3.9	77	0.77	1,2-DBEA(EDB)
37.65	264080	526.0	10519	105.19	1CL4FBZ (SURR)
38.16	1295	0.0	0	0.00	CHLOROBENZENE
38.34	427	0.0	0	0.00	1,1,1,2-PCA
39.04	546136	5.0	100	1.00	1CL2FBZ (IS)
42.22	407	0.6	11	0.11	1,1,2,2-PCA
42.54	174223	0.0	0	0.00	
43.76	333	2.9	59	0.59	2-CL TOLUENE
43.95	469	0.5	10	0.10	4-CL TOLUENE
46.70	1096	1.4	28	0.28	1,3-DCB
47.10	1374	1.1	23	0.23	1,4-DCB
48.48	2186	1.9	39	0.39	1,2-DCB
54.43	1037	0.7	15	0.15	1,2,4-TCB
54.86	9628	0.6	12	0.12	HEXACLBUTADIENE
56.12	847	1.0	20	0.20	1,2,3-TCB

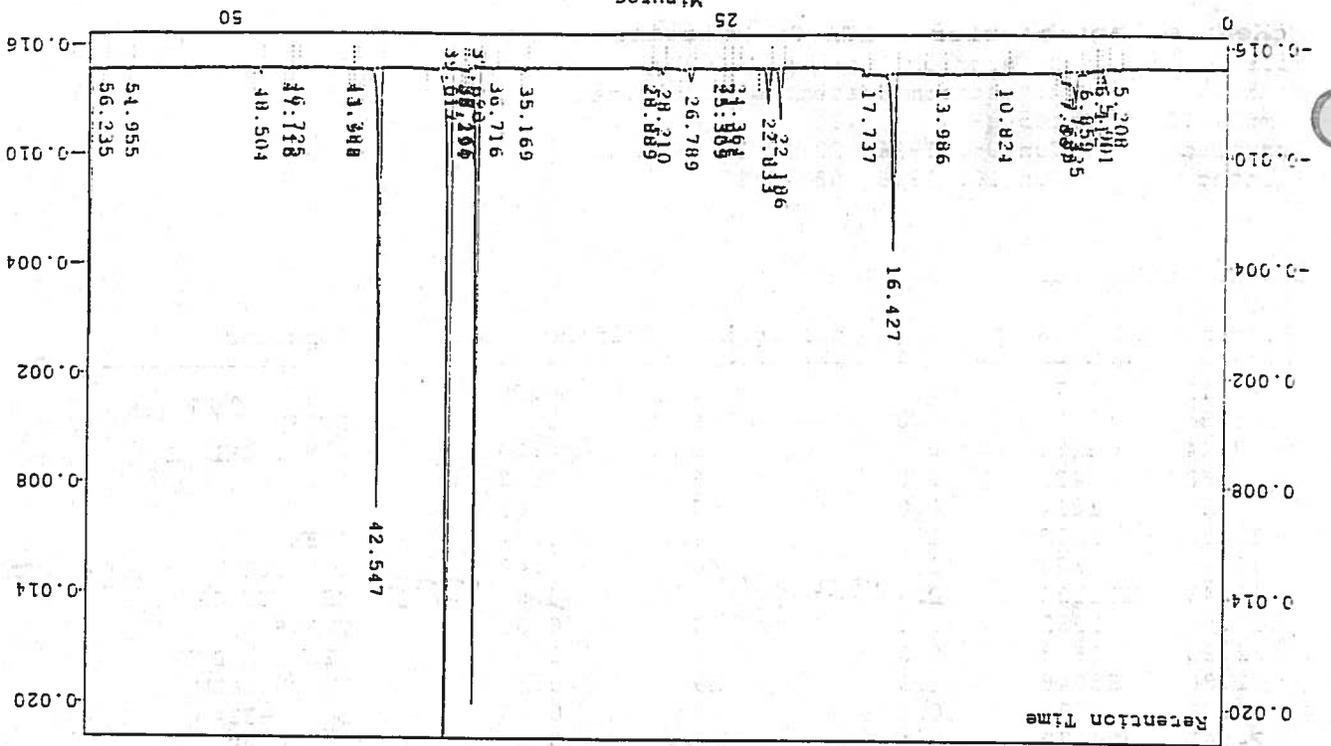
Used this run to identify and confirm analytes in the 1st run. This was part holding time so not reported.

UI 12 Jun 96

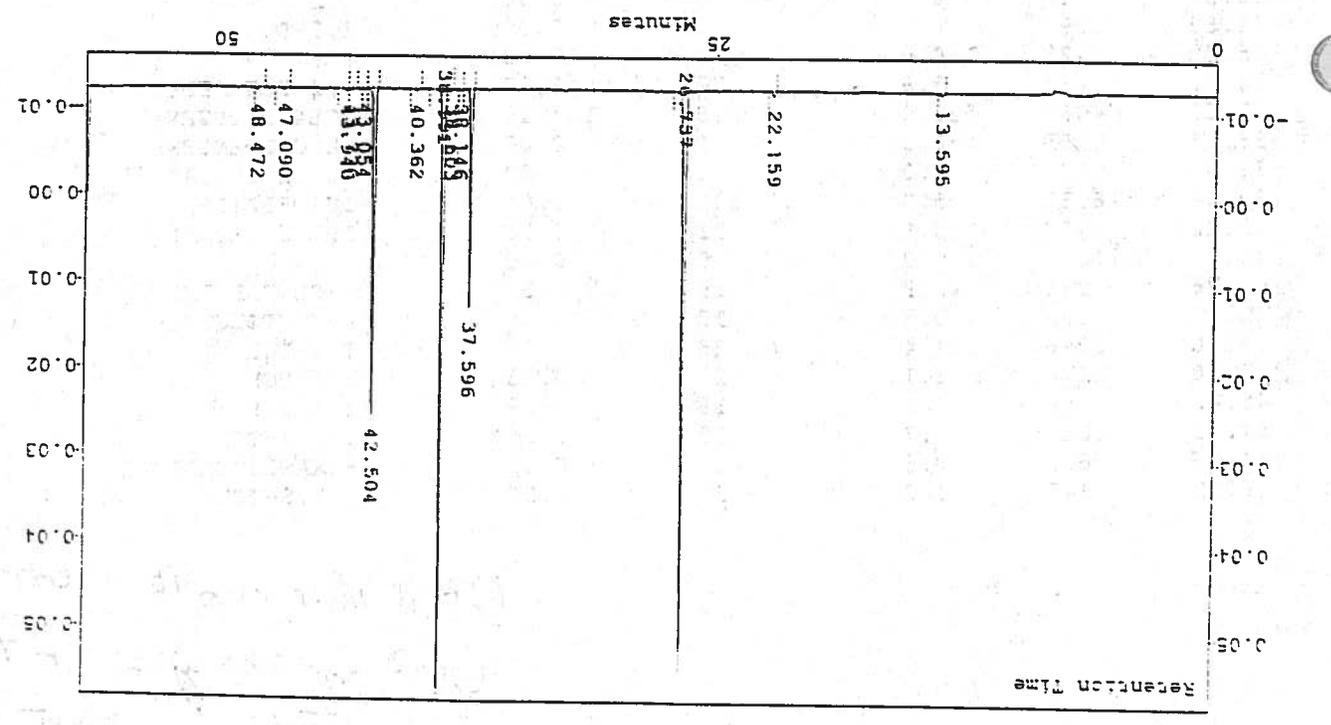
Noted on report only.

AE 17 Jun 96

Mckenzie Laboratories - EPA GC Volatiles
 File : c:\ezchrom\voatemp\360608.05
 Method : c:\ezchrom\voatemp\3vca0603.met
 Sample ID : 501SR
 13
 Printed : Jun 08, 1996 23:36:29
 Date : Jun 10, 1996 08:48:29



c:\ezchrom\voatemp\360608.05 -- Channel B



c:\ezchrom\voatemp\360609.05 -- Channel A

McKenzie Laboratories - EPA GC Volatiles

File : c:\erchrom\voatemp\360608.05
 Method : c:\erchrom\voatemp\3vca0603.met
 Sample ID : 5051sR 13
 Acquired : Jun 08, 1996 23:36:29
 Printed : Jun 10, 1996 08:48:31

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
13.59	3791	0.0	0	0.00	
22.16	5588	5.3	105	1.05	Cis 1,2-dce
26.74	507533	5.0	100	1.00	Flbenzene (IS)
37.60	144707	400.2	8003	80.03	1cl4fbz (surr)
38.15	1546	1.2	24	0.24	Chlorobenzene
38.60	2130	0.0	0	0.00	M/P Xylene
38.99	475994	5.0	100	1.00	1cl2flbz (IS)
40.36	2665	4.5	91	0.91	Styrene
42.50	244556	0.0	0	0.00	
43.05	1634	4.1	83	0.83	n-propylbenzene
43.73	3143	8.4	168	1.68	1,3,5-tmb/2-cl tol
43.94	3459	5.3	106	1.06	4-cl toluene
47.09	2844	3.4	67	0.67	1,4-dcb
48.47	2595	2.8	56	0.56	1,2-dcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\erchrom\voatemp\360608.05
 Method : c:\erchrom\voatemp\3voa0603.mer
 Sample ID : 5051sR 13
 Acquired : Jun 08, 1996 23:36:28
 Printed : Jun 10, 1996 08:48:32

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
5.21	1163	0.0	0	0.00	
5.90	8759	4.9	99	0.99	DCDFM RRT ag. CT
6.11	1126	0.0	0	0.00	
6.86	5739	0.0	0	0.00	CHLOROMETHANE
7.32	26741	3.5	71	0.71	VINYL CHLORIDE
7.68	5548	0.0	0	0.00	
7.87	9563	0.0	0	0.00	
10.82	1915	1.7	35	0.35	TCFM
13.99	882	2.0	40	0.40	1,1-DCE
16.43	109121	0.010.7	164 µg	0.00 2.14	METH CHLORIDE Calc. ag. CT, see OOC.
17.74	2939	0.0	0	0.00	TRANS 1,2-DCE
22.19	26652	1.0	21	0.21 <MAL	CIS 1,2-DCE
22.83	19582	0.7	14	0.14	CHLOROFORM
24.36	854	0.0	0	0.00	1,1,1-TCA
24.95	1187	0.4	9	0.09	1,1-DCPE
25.31	1251	0.1	2	0.02	CARBON TET
26.79	9710	15.3	306	3.06	2-CL ETH VI ETH
28.21	2765	0.0	0	0.00	TCE
28.89	1008	0.0	0	0.00	1,2-DCPA
35.17	1559	0.0	0	0.00	PCE
36.72	434	3.8	76	0.76	1,2-DBEA (EDB)
37.62	251496	474.6	9492	94.92	1CL4FBZ (SURR)
38.17	1156	0.0	0	0.00	CHLOROBENZENE
38.29	302	0.0	0	0.00	1,1,1,2-PCA
39.02	575779	5.0	100	1.00	1CL2FBZ (IS)
42.55	176571	0.0	0	0.00	
43.78	599	3.0	61	0.61	2-CL TOLUENE
43.95	909	0.6	13	0.13	4-CL TOLUENE
46.73	734	1.3	26	0.26	1,3-DCB
47.12	811	1.0	20	0.20	1,4-DCB
48.50	2786	2.0	41	0.41	1,2-DCB
54.96	651	0.0	0	0.00	HEXACLBUTADIENE
56.23	387	0.8	17	0.17	1,2,3-TCB

Used this run to identify
 and confirm analyte in
 this net run. This was
 part holding time so
 not reported.

UI 12 Jun 96

1617 Jun 96

Volatiles Instrument 3 Run Log

032

CTL STD VUAD 0523-3 10.007/ul
 CHK STD VUAC 0523-3 ↓
 Mtx Spk CTL STD
 INT STD IS 0523-08 4.003/ul
 EXT SURR ESW 0523-05 20.0 ul/ul

Analyst zw/AG Date 08 Jun 96
 Printed TH Date 10 Jun 96
 Onto Network TH Date 10 Jun 96
 Method Used 3UOAG603.MET
 Batch Used 060813.500
 *E zw of Jun 96 **E) MW 09 Jun 96

Data File Number	SP#	Sample ID	Aliquot	Client ID	Method	Comments	Hnu	pH
36060801	9	CTL VOA	5.0 μ l	NA	All	✓ <u>11 Jun 96</u> <u>MeCl₂ OUT</u>		
02	10	MTHD RLK W	50 μ l	↓	↓	✓ <u>DCDFM contamination RRT ag CTL</u> <u>@ TH 10 Jun 96</u>		
03	11	5049sR	50.0 μ l	↓	8010/8020	✓ <u>DCDFM RRT ag CTL</u> <u>M=OH</u> <u>11 Jun 96</u>		
04	12	5050sR	↓	see ext. log	↓	✓ <u>DCDFM RRT by CTL</u>		
05	13	5051sR	↓	see ext. log	↓	✓ <u>DCDFM RRT by CTL</u>		
06	14	4834R x 4000	500 μ l	DM-MP3D	601	✓ <u>TWICE DILUTION. FIRST: 1:1000 of sample (5 μl) *</u> <u>11 Jun 96</u> <u>second: 1:40 of first (12.5 μl) *</u>		
07	15	4584R x 10	500 μ l	IS-WCC28-83-0	601	✓ <u>13 Jun 96</u>		
08	16	5057x50	100 μ l	MP13 B	601	✓ <u>DCDFM RRT ag CTL</u>	15	<2
09	17	5058	5.0 μ l	EB DM 125	↓	✓ <u>DCDFM <0.5 ppb</u>	2	↓
10	2	CHK VOA	5.0 μ l	NA	All	✓ <u>11 Jun 96</u> <u>MeCl₂ OUT</u>		
<p><i>MeCl₂ contam. on Monday has affected the curve for the week so far</i></p> <p style="text-align: right;"><u>TH 10 Jun 96</u></p>								

INTERNAL STANDARD WORKSHEET

METHOD: All Volatiles
DATE: 03 JUN 96

INSTRUMENT: 3
OPERATOR: LT

STANDARD CONC. (ppb)	PID DETECTOR FLUOROBENZENE	PID DETECTOR 1-CHLORO-2-FLUOROBENZENE	HALL (ELCD) DETECTOR 1-CHLORO-2-FLUOROBENZENE
	RESPONSE AREA	RESPONSE AREA	RESPONSE AREA
<u>0.4</u>	<u>388060</u>	<u>330600</u>	<u>542532</u>
<u>0.5</u>	<u>786608</u>	<u>726002</u>	<u>531039</u>
<u>1.0</u>	<u>826885</u>	<u>760697</u>	<u>562683</u>
<u>5.0</u>	<u>820406</u>	<u>762154</u>	<u>593539</u>
<u>10.0</u>	<u>823972</u>	<u>773407</u>	<u>560592</u>
<u>25.0</u>	<u>828883</u>	<u>785580</u>	<u>627335</u>
<u>50.0</u>	<u>811964</u>	<u>789482</u>	<u>671429</u>
MEAN	<u>812392</u>	<u>761132</u>	<u>585022</u>
UPPER LIMIT (130%)	<u>1056116</u>	<u>989472</u>	<u>760529</u>
LOWER LIMIT (70%)	<u>568678</u>	<u>532792</u>	<u>409515</u>
Std. Dev.	<u>16636</u>	<u>23052</u>	<u>46027</u>
+ 3 Std. Dev.	<u>862305 (100%)</u>	<u>830288 (109%)</u>	<u>723253 (124%)</u>
- 3 Std. Dev.	<u>762489 (94%)</u>	<u>691976 (91%)</u>	<u>446291 (76%)</u>

Comments:

Initials LT Date 05 JUN 96

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\chrom\360603.06
 Method : c:\ezchrom\chrom\3voa0603.met
 Sample ID : 0.5 ppb 6
 Acquired : Jun 03, 1996 23:00:51
 Printed : Jun 04, 1996 17:03:15

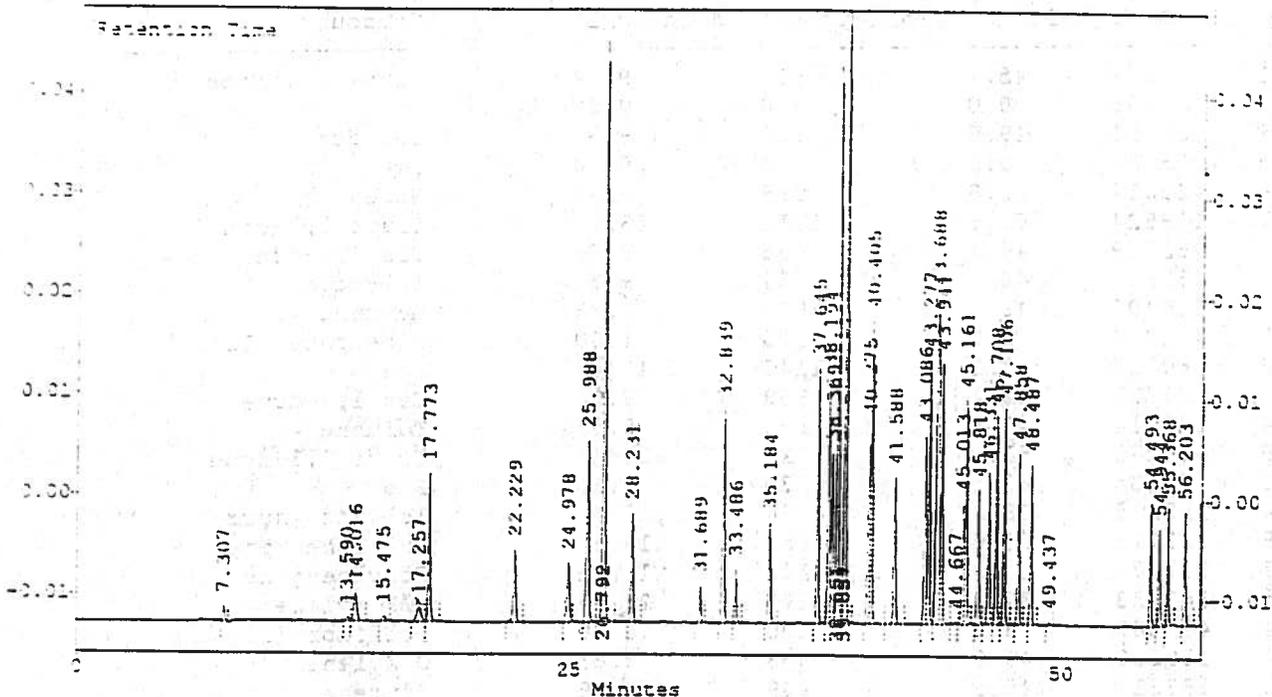
Channel A results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
6.10	18057	0.0	0	0.00	
6.99	5307	0.0	0	0.00	
7.26	4308	2.5	50	0.50	Vinyl Chloride
13.52	9729	0.0	0	0.00	
13.94	2423	2.5	50	0.50	1,1-dce
17.22	2255	2.5	50	0.50	Mtbe
17.70	5379	2.5	50	0.50	Trans 1,2-dce
18.32	1742	0.0	0	0.00	
22.15	5180	2.5	50	0.50	Cis 1,2-dce
24.90	4141	2.5	50	0.50	1,1-dcpe
25.92	10885	2.5	50	0.50	Benzene
26.73	786608	5.0	100	1.00	Flbenzene (IS)
28.17	8619	2.5	50	0.50	Tce 0.0119 ar ✓
31.65	2277	2.5	50	0.50	Cis 1,3-dcpe
32.79	11616	2.5	50	0.50	Toluene 0.01599 0.0160 ar ✓
33.44	2935	2.5	50	0.50	Trans 1,3-dcpe
35.13	5424	2.5	50	0.50	Pce
37.58	11674	25.0	500	5.00	1cl4fbz (surr)
38.14	10916	2.5	50	0.50	Chlorobenzene
38.31	9718	2.5	50	0.50	Ethylbenzene
38.59	21358	5.0	100	1.00	M/P Xylene
38.98	726002	5.0	100	1.00	1cl2flbz (IS)
40.22	9382	2.5	50	0.50	O Xylene 0.01292 a.r. ✓
40.35	12267	2.5	50	0.50	Styrene
41.55	8178	2.5	50	0.50	Isopropylbenzene
43.07	9132	2.5	50	0.50	n-propylbenzene
43.20	10020	2.5	50	0.50	Bromobenzene
43.68	22503	5.0	100	1.00	1,3,5-tmb/2-cl tol
43.93	10808	2.5	50	0.50	4-cl toluene
45.00	7102	2.5	50	0.50	t-butylbenzene
45.16	10347	2.5	50	0.50	1,2,4-tmb
45.81	8101	2.5	50	0.50	s-butylbenzene
46.32	8571	2.5	50	0.50	p-isopropyltoluene
46.70	9310	2.5	50	0.50	1,3-dcb
47.10	9648	2.5	50	0.50	1,4-dcb
47.85	8815	2.5	50	0.50	n-butylbenzene
48.48	8761	2.5	50	0.50	1,2-dcb 0.01207 ar ✓
49.44	1610	0.0	0	0.00	
54.42	5143	2.5	50	0.50	1,2,4-tcb
54.86	5641	2.5	50	0.50	Hexachlorobutadiene
55.29	5511	2.5	50	0.50	Napthalene
56.12	4677	2.5	50	0.50	1,2,3-tcb

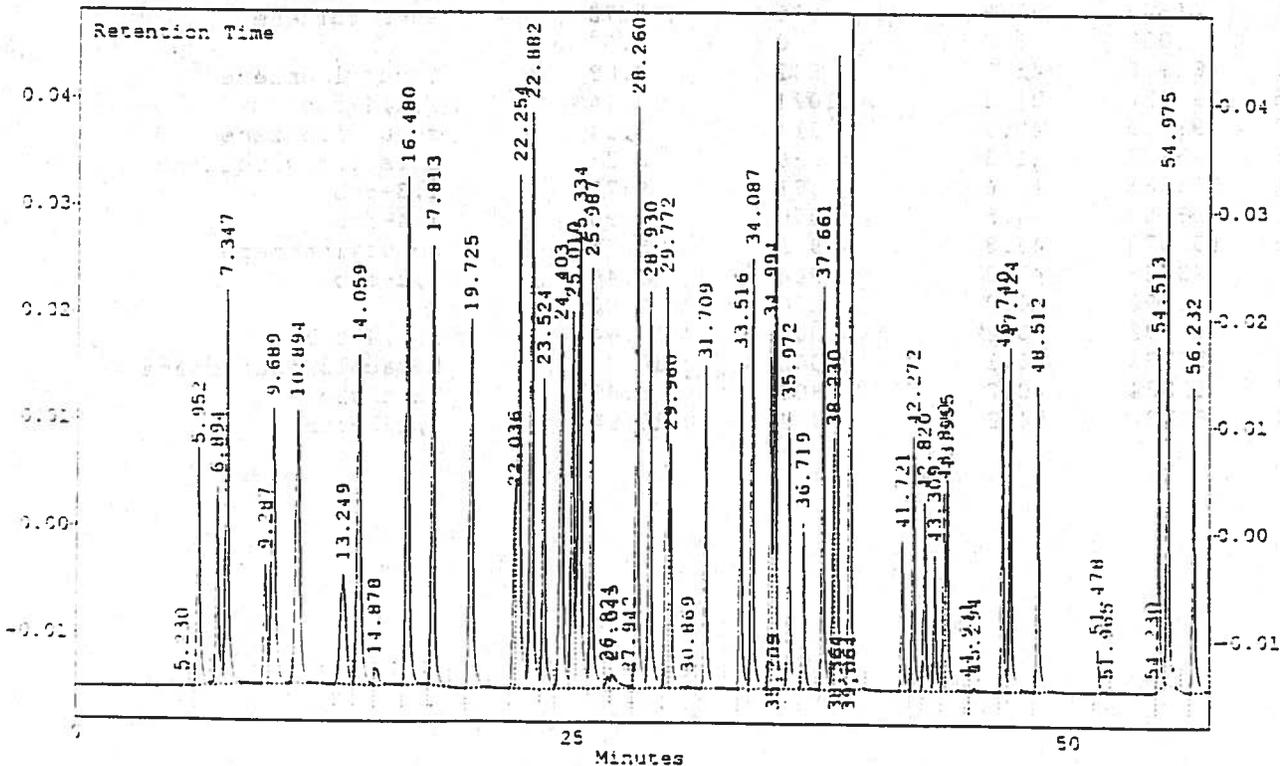
McKenzie Laboratories - EPA GC Volatiles

File : c:\eschrom\voatemp\360608.10
 Method : c:\eschrom\voatemp\3vca0603.met
 Sample ID : CHK VOA 2
 Acquired : Jun 09, 1996 05:43:13
 Printed : Jun 10, 1996 08:49:40

c:\eschrom\voatemp\360608.10 -- Channel 1



c:\eschrom\voatemp\360609.10 -- Channel 2



McKenzie Laboratories - EPA GC Volatiles

File : c:\erchrom\voatemp\360608.10
 Method : c:\erchrom\voatemp\3vca0603.met
 Sample ID : CHK VOA 2
 Acquired : Jun 09, 1996 05:48:13
 Printed : Jun 10, 1996 08:49:42

Channel A Results

RT(min)	Pk Area	Air(ng)	Soil(µg/kg)	Soln(µg/L)	Compound
7.31	10553	45.7	914	9.14	Vinyl Chloride
13.59	4486	0.0	0	0.00	
14.02	33391	49.6	991	9.91	1,1-dce
15.48	6034	0.0	0	0.00	
17.26	23314	44.9	998	8.98	Mtbe
17.77	109824	65.6	1311	13.11	Trans 1,2-dce
22.23	62869	46.8	936	9.36	Cis 1,2-dce
24.98	51559	46.7	934	9.34	1,1-dcpe
25.99	145400	46.7	933	9.33	Benzene
26.79	432922	5.0	100	1.00	Flbenzene (IS)
28.23	80723	57.1	1143	11.43	Tce
31.69	23723	45.4	908	9.08	Cis 1,3-dcpe
32.84	139914	42.8	855	8.55	Toluene
33.49	31272	51.1	1021	10.21	Trans 1,3-dcpe
35.18	69535	61.5	1230	12.30	Pce
37.64	145255	438.7	8774	87.74	1cl4fbz (surr)
38.19	138718	52.6	1053	10.53	Chlorobenzene
38.37	117074	57.3	1146	11.46	Ethylbenzene
38.65	345353	109.5	2189	21.89	M/P Xylene
39.04	431383	5.0	100	1.00	1cl2flbz (IS)
40.28	118630	43.2	863	8.63	O Xylene
40.41	183311	45.5	909	9.09	Styrene
41.59	99128	57.4	1148	11.48	Isopropylbenzene
43.09	113708	43.5	870	8.70	n-propylbenzene
43.28	151836	50.5	1009	10.09	Bromobenzene
43.69	334532	91.4	1829	18.29	1,3,5-tmb/2-cl tol
43.94	146643	43.9	878	8.78	4-cl toluene
44.67	2037	0.0	0	0.00	
45.01	82948	45.1	902	9.02	t-butylbenzene
45.16	139812	51.2	1024	10.24	1,2,4-tmb
45.82	91909	40.7	814	8.14	s-butylbenzene
46.33	95792	41.3	826	8.26	p-isopropyltoluene
46.71	118386	48.6	971	9.71	1,3-dcb
47.11	116853	44.5	890	8.90	1,4-dcb
47.86	101078	43.8	875	8.75	n-butylbenzene
48.49	93786	47.3	946	9.46	1,2-dcb
49.44	2392	0.0	0	0.00	
54.49	64482	50.2	1004	10.04	1,2,4-tcb
54.94	58733	50.1	1002	10.02	Hexachlorobutadiene
55.37	62334	40.2	803	8.03	Napthalene
56.20	62724	54.2	1084	10.84	1,2,3-tcb

McKenzie Laboratories - EPA GC Volatiles

File : c:\ezchrom\voatemp\360608.10
 Method : c:\ezchrom\voatemp\3vca0603.met
 Sample ID : CHK VOA 2
 Acquired : Jun 09, 1996 05:48:13
 Printed : Jun 10, 1996 08:49:42

Channel 3 Results

RT (min)	pK Area	ng	Soil (µg/kg)	Soln (µg/L)	Compound
5.23	550	0.0	0	0.00	
5.95	232212	49.8	997	9.97	DCDFM
6.89	169111	42.5	849	8.49**	CHLOROMETHANE
7.35	348160	55.0	1100	11.00	VINYL CHLORIDE
9.29	117491	48.1	963	9.63	BROMOMETHANE
9.69	360073	52.5	1051	10.51	CHLOROETHANE
10.89	419935	49.0	959	9.59	TCFM
13.25	211759	45.0	900	9.00	FREON 113
14.06	404207	51.7	1033	10.33	1,1-DCE
14.88	30627	0.0	0	0.00	
16.48	529854	0.0	0	0.00***	METH CHLORIDE
17.81	405472	54.3	1085	10.85	TRANS 1,2-DCE
19.73	423519	57.0	1140	11.40	1,1-DCA
22.04	143696	38.9	779	7.79	2,2-DCEP
22.25	546421	56.5	1130	11.30	CIS 1,2-DCE
22.88	549083	56.4	1129	11.29	CHLOROFORM
23.52	268510	52.9	1058	10.58	BCM
24.40	426883	51.5	1031	10.31	1,1,1-TCA
25.01	318492	56.7	1135	11.35	1,1-DCPE
25.33	527140	53.7	1073	10.73	CARBON TET
25.99	349713	53.3	1066	10.66	1,2-DCA
26.82	13891	0.0	0	0.00	
27.04	34762	43.0	860	8.60	2-CL ETH VI ETH
27.94	2046	0.0	0	0.00	
28.26	459859	54.9	1097	10.97	TCE
28.93	356761	51.3	1025	10.25	1,2-DCEP
29.77	293965	51.3	1025	10.25	BRDCLMETHANE
29.96	208426	53.6	1072	10.72	DIBROMOMETHANE
30.87	2393	0.0	0	0.00	
31.71	239774	42.7	855	8.55	CIS 1,3-DCPE
33.52	220490	47.1	942	9.42	TRANS 1,3-DCPE
34.09	328843	52.2	1043	10.43	1,1,2-TCA
34.99	227475	51.4	1028	10.28	1,3-DCEP
35.21	526924	56.3	1126	11.26	PCE
35.97	216995	53.8	1075	10.75	DIBRCLMETHANE
36.72	122581	52.4	1047	10.47	1,2-DBEA (EDB)
37.66	295762	537.4	10748	107.48	1CL4FBZ (SURR)
38.23	108846	53.3	1066	10.66	CHLOROBENZENE
38.36	557463	55.5	1110	11.10	1,1,1,2-PCA
39.06	598782	5.0	100	1.00	1CL2FBZ (IS)
41.72	107537	51.8	1036	10.36	BROMOFORM
42.27	188374	50.4	1008	10.08	1,1,2,2-PCA
42.82	140831	50.2	1004	10.04	1,2,3-TCPA
43.31	99134	51.4	1029	10.29	BROMOBENZENE
43.80	123600	49.9	999	9.99	2-CL TOLUENE
43.95	170220	53.0	1060	10.60	4-CL TOLUENE
44.93	568	0.0	0	0.00	
45.29	3530	0.0	0	0.00	
46.74	218691	49.0	981	9.81	1,3-DCB
47.12	239741	48.9	979	9.79	1,4-DCB
48.51	214510	49.7	994	9.94	1,2-DCB

Continued...

File : c:\ezchrom\voatemp\360608.10
 Method : c:\ezchrom\voatemp\3voa0603.met
 Sample ID : CHK VOA 2
 Acquired : Jun 09, 1996 05:48:13
 Printed : Jun 10, 1996 08:49:42

Channel B Results

RT(min)	pK Area	ng	Soil (µg/kg)	Soln (µg/l)	Compound
51.48	31187	50.6	1012	10.12	1,2-DBr-3-CPA
51.97	340	0.0	0	0.00	
54.23	719	0.0	0	0.00	
54.51	201177	45.3	905	9.05	1,2,4-TCB
54.98	337614	45.9	919	9.18	HEXACHLOROCYCLOHEPTADIENE
56.23	200856	49.1	982	9.82	1,2,3-TCB

* CTC IS OK

** out of ±15% criteria

*** Lab Contamination: OOC Form required
in curve.

KW

11 Jun 96

16 Jun 96